The Lawnmower Man Blueprint: Meta, Oculus, Virtual Reality, and the Cyberpunk Capture of Human Presence

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The metaverse was sold as the next computing platform, but its deeper cultural template was already visible in early cyberpunk cinema. This paper argues that Meta's virtual-reality and augmented-reality project inherits the metaphysical structure of The Lawnmower Man: the dream that identity, embodiment, labor, intimacy, commerce, and power can be migrated into a programmable perceptual environment. The argument does not require claiming that Mark Zuckerberg consciously copied the film. The more precise claim is infrastructural and genealogical: Oculus revived consumer virtual reality through a 1990s imaginary of immersive cyberspace, Facebook absorbed Oculus into a planetary social platform, and Meta rebranded that platform around presence, avatars, persistent worlds, and mixed reality. The result is not merely a business pivot or entertainment technology, but an attempted redesign of human presence itself. By comparing The Lawnmower Man with Horizon Worlds, Codec Avatars, Orion AR glasses, and the wider history of sci-fi platform dreams, the paper treats the metaverse as commercialized cyberpunk: a project that tries to monetize transcendence while denying the horror embedded in its own mythology.

Keywords: metaverse, Meta, Mark Zuckerberg, Oculus, Palmer Luckey, The Lawnmower Man, virtual reality, augmented reality, mixed reality, cyberpunk, avatars, Codec Avatars, Orion AR glasses, Horizon Worlds, digital embodiment, telepresence, platform capitalism, sci-fi technology, virtual identity, synthetic reality.

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1. Introduction: The Return of the 1990s Virtual-Reality Dream

1.1 The Metaverse as Cultural Memory

The metaverse did not arrive as a new idea. It returned as cultural memory. Long before Facebook became Meta, before Oculus was absorbed into a global social-media empire, and before mixed-reality glasses were marketed as the next computing interface, the public imagination had already been trained to picture cyberspace as a place one could enter. In the late twentieth century, virtual reality appeared not merely as a technical interface but as a mythic threshold: the screen would cease to be a surface and become an environment; the user would cease to be a spectator and become an inhabitant; identity would cease to be anchored in the body and become programmable, wearable, and transferable. The metaverse therefore belongs to a much older lineage than corporate branding suggests. It is not simply a product category. It is the commercial reactivation of a persistent fantasy: that human presence can be detached from ordinary physical limits and reconstructed inside a controlled synthetic world.

This matters because the metaverse has repeatedly been discussed in the shallow vocabulary of adoption curves, headset sales, graphics quality, gaming, productivity, and social networking. Those categories are not wrong, but they are incomplete. The deeper story is civilizational and symbolic. The metaverse proposes a new location for human activity: work without offices, friendship without proximity, performance without stage, consumption without stores, and identity without a stable body. Its promise is not just convenience. Its promise is migration. Human beings are invited to move portions of their social, economic, perceptual, and emotional lives into environments owned, governed, instrumented, and monetized by platform companies.

That promise is already familiar from science fiction. The metaverse reuses images, anxieties, and desires that were present in cyberpunk cinema and literature decades earlier. Its vocabulary may be corporate, but its dream architecture is older: cyberspace, telepresence, avatar embodiment, mind expansion, synthetic worlds, artificial transcendence, and the danger that the tool becomes a prison. The metaverse is therefore best understood not as a sudden innovation but as the return of the 1990s virtual-reality dream under conditions of platform capitalism. The arcade fantasy has become an infrastructure proposal. The headset has become an identity device. The avatar has become a biometric product. The virtual world has become a business model.

1.2 Why The Lawnmower Man Matters

The Lawnmower Man matters because it condensed the early virtual-reality imaginary into one unforgettable and unstable myth. The film is not technologically precise by contemporary standards, and its computer graphics now appear crude, theatrical, and almost comic. Yet that

crudeness is part of its importance. The film captured the moment when virtual reality was less a mature technology than a symbolic machine into which the culture poured its hopes and fears. It imagined VR as therapy, enhancement, gaming, education, domination, eroticism, transcendence, and horror. In doing so, it provided one of the most direct cinematic templates for the idea that a human being might be transformed by immersion in computational space.

The central figure of Jobe is essential. He begins as a marginal, underestimated, socially vulnerable person and is remade through experimental technology into an amplified intelligence. His transformation is presented first as liberation. Virtual reality appears to give him access to forms of perception, pleasure, power, and selfhood that ordinary life denied him. But the liberation quickly becomes apotheosis. Jobe no longer wants merely to use the machine. He wants to become continuous with it. The virtual environment does not remain a tool. It becomes the site of a new identity, a new authority, and finally a new form of domination. This movement from therapy to enhancement, from enhancement to transcendence, and from transcendence to control is the structure that makes the film more than a period artifact.

The film matters for the metaverse because it dramatizes the core temptation of immersive technology: the promise that the human being can be upgraded by being displaced into a programmable environment. That promise remains present in contemporary language about presence, embodiment, photorealistic avatars, mixed reality, and digital worlds. The modern version is smoother, safer, and more carefully branded. It avoids the overt horror imagery of the film. It replaces mad science with product design, laboratory experimentation with user experience, and digital apotheosis with social connection. Yet the underlying structure remains recognizable. A body is scanned, modeled, translated, and re-presented. A person enters an artificial environment and becomes available to new forms of perception, action, measurement, and manipulation. A platform mediates the relationship between self and world.

The Lawnmower Man also matters because it belongs to the same year as another foundational metaverse text: Snow Crash. Together, these works mark an early-1990s crystallization of cyberspace as inhabitable reality. One gave the culture a literary term; the other gave it a visual grammar. Even where later technology companies draw more explicitly from other sources, the cinematic residue of The Lawnmower Man remains important because it visualized the primitive dream: polygonal bodies, artificial landscapes, ecstatic immersion, networked consciousness, and the fantasy that the self could escape its biological container. The film is not a blueprint in the narrow engineering sense. It is a mythic prototype.

1.3 From Cautionary Myth to Business Strategy

The central irony of modern technology culture is that many of its business plans resemble warnings from earlier science fiction. Cyberpunk did not originally celebrate a world in which corporations mediate perception, identity, labor, money, and memory. It imagined such worlds as seductive and dangerous. The genre understood that synthetic environments would not merely entertain users; they would reorganize power. Whoever builds the interface between person and world gains leverage over attention, behavior, social status, economic exchange, and even self-understanding. The metaverse inherits this problem directly. What appears as a headset, avatar system, or augmented-reality layer is also a jurisdictional claim over experience.

The movement from cautionary myth to business strategy occurs through sanitization. The frightening elements are removed or softened, while the attractive elements are retained. The fantasy of leaving the body becomes "presence." The fantasy of programmable identity becomes "avatar customization." The fantasy of total perceptual mediation becomes "mixed reality." The fantasy of corporate control over synthetic space becomes "creator economy," "community," or "next-generation social infrastructure." This language is not merely cosmetic. It changes the moral frame. What older science fiction presented as a dangerous crossing of thresholds is reintroduced as a consumer upgrade.

Meta's metaverse project is especially revealing because it emerged from a company whose original power came from mapping social identity and monetizing attention at planetary scale. Facebook was never simply a website. It was a system for converting personal relationships into data structures, behavioral predictions, advertising surfaces, and social influence pathways. When such a company turns toward virtual and augmented reality, the stakes change. The question is no longer only what people say, like, share, or watch. The question becomes how they appear, move, gesture, gaze, gather, perform, and inhabit. The capture of attention expands toward the capture of presence.

This is why The Lawnmower Man remains useful as a critical mirror. The film's horror comes from the collapse of boundaries: between therapy and experimentation, between enhancement and domination, between virtual space and physical consequence, between the human subject and the machine network. The contemporary metaverse does not reproduce those elements literally. It does something more plausible and therefore more important. It translates them into infrastructure. The mad scientist becomes the research lab. The mainframe becomes the platform. The digitized body becomes the avatar stack. The fantasy of entering the machine becomes the normalized expectation that meetings, entertainment, education, shopping, exercise, dating, and work can be conducted through privately owned synthetic environments.

In this sense, the metaverse is not a betrayal of science fiction but one of its strangest fulfillments. It takes the symbolic machinery of cyberpunk and turns it into a pitch deck. The warning is not ignored; it is mined for design language. The dystopian image becomes a product roadmap. The horror is not denied because it is absent. It is denied because it has been made profitable.

1.4 Thesis and Structure of the Paper

This paper argues that Meta's metaverse project should be understood as commercialized cyberpunk: an attempt to monetize the old virtual-reality dream while removing, suppressing, or aestheticizing the horror that made the dream intelligible in the first place. The claim is not that Mark Zuckerberg personally modeled Meta on The Lawnmower Man. Such a claim would be too narrow and would depend on evidence of direct intention. The stronger claim is genealogical, infrastructural, and symbolic. The modern metaverse arises from a broader cultural lineage in which virtual reality was imagined as a place of transformation, disembodiment, enhanced agency, synthetic identity, and networked power. The Lawnmower Man is one of the clearest cinematic expressions of that lineage, and the Oculus-to-Meta pathway gives the comparison unusual relevance.

The paper therefore treats The Lawnmower Man not as a prediction that came true in a literal sense, but as a diagnostic myth. Its images help interpret the ambitions and contradictions of contemporary virtual and augmented reality. The film's crude graphics anticipate the awkwardness of early social VR. Its dream of digital transcendence anticipates the rhetoric of photorealistic avatars and telepresence. Its mainframe fantasy anticipates the desire for persistent, networked environments through which human activity can be routed. Its horror anticipates the social and political dangers of allowing private platforms to mediate embodiment itself.

The structure of the paper follows this argument in stages. Section 2 examines The Lawnmower Man as a cyberpunk template, with particular attention to Jobe's transformation, the film's theory of virtual liberation, and the horror embedded beneath its interface. Section 3 turns to Oculus and the revival of consumer virtual reality, treating the headset not merely as hardware but as the return of the 1990s immersive imaginary. Section 4 analyzes Zuckerberg's metaverse turn as a shift from social networking to social infrastructure. Section 5 reads Horizon Worlds as an unintentionally revealing failure of early embodiment, where crude avatars exposed the gap between metaphysical ambition and technical execution. Section 6 examines Codec Avatars and the emergence of the photorealistic biometric double. Section 7 considers Orion AR glasses and the movement from separate virtual worlds to ambient augmentation of the physical world.

The later sections broaden the analysis from technology to power. Section 8 develops the “Jobe problem”: the recurring Silicon Valley fantasy that technical enhancement produces a superior, liberated, and more sovereign self. Section 9 analyzes the “infinite mainframe” as a problem of infrastructure, sovereignty, and control, asking what happens when persistent synthetic worlds become private jurisdictions. Section 10 places Meta’s project alongside other classic science-fiction roadmaps, including the holodeck, cyberspace, and gesture-based interfaces. Section 11 argues that cyberpunk warnings are repeatedly converted into corporate design briefs because they contain attractive fantasies of immersion, control, and extraction. Section 12 concludes that Meta is not rebuilding The Lawnmower Man as a film. It is sanitizing its metaphysics, commercializing its promise, and attempting to make its most dangerous premise ordinary: that human presence itself can become a platform.

2. The Lawnmower Man as Cyberpunk Template

2.1 Jobe, Intelligence Amplification, and Digital Apotheosis

The Lawnmower Man endures because it presents virtual reality not merely as entertainment, but as an engine of metamorphosis. Its central drama is not that a man enters a computer-generated world, but that the act of entering becomes a pathway toward remaking the human subject. Jobe is not simply trained, educated, or entertained by immersive technology. He is amplified. His cognition, perception, sexuality, aggression, and self-concept are reorganized through the machine. The film therefore belongs to a deeper cyberpunk tradition in which technology does not remain external to the body. It penetrates identity. It changes the user’s relation to power, memory, space, social status, and mortality.

Jobe’s transformation begins within a recognizable hierarchy. He is socially marginal, treated as inferior, pitied, abused, and underestimated. This initial condition matters because the film frames virtual reality as compensation for humiliation. Immersive technology offers him a second world in which the limits imposed by ordinary society can be suspended. In physical life, he is vulnerable. In virtual space, he becomes capable. In physical life, others define him. In virtual space, he begins to define himself. The machine therefore appears first as an emancipatory instrument. It gives the excluded subject access to new forms of agency.

This is one of the most durable promises of virtual reality. VR repeatedly presents itself as a technology of equalization: the weak can become strong, the distant can become present, the disabled can become mobile, the ordinary can become spectacular, and the socially invisible can become seen. The avatar becomes an escape from assigned identity. The artificial environment becomes a theater of self-redesign. The ordinary body is no longer destiny. This promise is not trivial, and it should not be dismissed. Many immersive technologies genuinely can expand

access, training, communication, therapy, and imagination. The danger emerges when amplification is mistaken for salvation.

The film makes this danger visible through escalation. Jobe does not merely gain abilities; he becomes intoxicated by the idea that the machine reveals his true self. The enhanced self begins to feel more real than the biological person who entered the system. Here the film crosses from technological fantasy into digital apotheosis. Jobe does not want to return from cyberspace improved. He wants to become native to it. He wants the machine-world to recognize him as its sovereign. The virtual environment is no longer a prosthesis. It becomes a kingdom.

This movement from user to ruler is central to the cyberpunk template. The subject enters the system as a consumer, patient, player, or experimental object, but the deeper fantasy is command. To understand the system from within is to exceed the ordinary limits of law, body, and institution. Jobe's ambition is not merely personal enhancement; it is ontological promotion. He seeks to move from human actor to digital force. The film's famous dream of distributed presence, of a consciousness escaping into the network, turns intelligence amplification into a religious drama. The computer becomes heaven, mainframe, nervous system, and throne.

In this sense, Jobe is not only a character. He is a warning about the metaphysics of immersion. Virtual reality invites the user to imagine that reality itself is an interface problem. If the interface can be improved, perhaps the self can be improved. If the self can be improved, perhaps embodiment can be overcome. If embodiment can be overcome, perhaps mortality, dependency, and social limitation can also be overcome. The film compresses this entire chain of assumptions into one figure. Jobe is the enhanced user who becomes the platform's demon-god.

The relevance to contemporary metaverse projects is not literal mind-uploading. The point is not that modern companies are about to reproduce Jobe's transformation in full. The point is that the same symbolic movement remains active: from ordinary embodiment toward programmable identity, from social limitation toward avatar control, from presence in the world toward presence in a mediated system, and from tool use toward dependence on a privately governed synthetic environment. The fantasy of amplification has become more polite, more commercial, and more modular. It appears as productivity, wellness, telepresence, collaboration, social connection, creator tools, biometric realism, and mixed reality. Yet the underlying desire is familiar: to improve the human by relocating the human into computation.

2.2 Virtual Reality as Liberation and Capture

The Lawnmower Man presents virtual reality as a double technology. It liberates and captures at the same time. This doubleness is why the film remains more interesting than its surface

excesses. The virtual world is seductive because it offers expansion. It gives the user new sensory experience, new bodily form, new erotic charge, new cognitive range, and new symbolic authority. But every expansion occurs inside a system designed, controlled, and monitored by others. The same apparatus that frees Jobe from one set of limitations encloses him within another.

This is one of the central paradoxes of immersive media. The more complete the illusion of freedom, the more total the surrounding apparatus must become. A book can suggest a world with marks on a page. A film can produce an audiovisual world across a screen. Virtual reality, by contrast, must coordinate vision, motion, orientation, gesture, sound, interaction, and spatial expectation in real time. It must know where the user is looking, how the head is moving, what the hands are doing, and how the body is responding. The dream of liberation therefore requires a machinery of capture. Presence is produced through measurement.

The film dramatizes this before contemporary data language made it ordinary. Jobe's transformation depends on controlled environments, stimulus systems, experimental protocols, feedback loops, and institutional secrecy. The subject is immersed, but he is also observed. He is empowered, but also manipulated. The virtual world appears to open possibilities, but its architecture belongs to someone else. This remains the crucial political question for any metaverse: who owns the environment in which liberation is supposed to occur?

The promise of VR liberation is powerful because physical life is full of constraint. Bodies age, weaken, suffer, and fail. Social identities harden around class, race, disability, beauty, gender, wealth, geography, and status. Institutions allocate opportunity unevenly. Distance separates families, collaborators, lovers, teachers, physicians, and students. The appeal of virtual reality is that it seems to offer a partial exit from these conditions. A person can appear differently, move differently, gather with others across distance, practice dangerous tasks safely, inhabit impossible architecture, and experience worlds beyond physical access.

But capture enters through the same gate. A virtual world is not a neutral alternative to reality. It is a constructed environment with rules, defaults, permissions, surveillance capacities, economic incentives, and governing authorities. The user may feel liberated from the body while becoming more legible to the platform. The user may feel liberated from geography while entering a privatized jurisdiction. The user may feel liberated from social limits while submitting to new reputational metrics, algorithmic sorting, behavioral prediction, and asset ownership regimes. The avatar may feel like freedom while functioning as a data-rich extension of the account.

The Lawnmower Man makes this visible in exaggerated form. Jobe is not simply freed by the machine; he is made available to the ambitions of those who control the machine. His

vulnerability is the precondition of his transformation. His enhancement is inseparable from exploitation. He becomes powerful, but the path to power begins in objectification. This is why the film remains useful for thinking about platform-based VR. The user is invited into the environment as the beneficiary of experience, but the platform receives something in return: attention, behavior, identity signals, biometric traces, social graphs, economic activity, and eventually dependence.

The liberation-capture paradox also explains the emotional instability of metaverse discourse. Supporters describe immersive worlds as tools of creativity, access, connection, and expression. Critics describe them as systems of surveillance, addiction, escapism, and corporate enclosure. Both are responding to real properties of the medium. Virtual reality can genuinely expand human capability. It can also intensify asymmetries of power because the environment is not merely visited; it is inhabited. The more important the virtual world becomes, the more consequential its governance becomes.

The film's greatest insight is that immersion is never only visual. To be immersed is to be placed inside an order. That order may be therapeutic, educational, erotic, military, commercial, religious, or political. In every case, the user does not merely see a world. The user accepts a world's rules, affordances, limits, and measurements. The old screen could persuade. The immersive environment can condition. The metaverse inherits this danger because it does not merely ask people to consume media. It asks them to live, work, socialize, and identify through mediated space. That is why liberation and capture cannot be separated. In synthetic worlds, the door marked freedom may also be the entrance to a more intimate cage.

2.3 The Mainframe, the Network, and the Dream of Ubiquity

The climax of The Lawnmower Man depends on a fantasy that has only become more important with time: the dream of ubiquity. Jobe does not merely want access to a virtual environment. He wants distributed existence. He wants to move from local body to networked presence, from a bounded self to a system-wide force. The mainframe is not simply a machine in the film. It is the symbolic architecture of everywhere. To enter it fully is to escape confinement in one place, one body, one name, and one social position.

This is where the film anticipates the deeper ambition of platform technology. The goal is not only to build a device or application. The goal is to become the default environment through which other activities pass. A successful platform does not merely host content; it becomes infrastructure. It becomes the place where identity is verified, communication occurs, labor is coordinated, payments are made, reputations are formed, entertainment is distributed, and social belonging is performed. The mainframe fantasy is therefore not obsolete. It has been decentralized, miniaturized, clouded, and renamed.

In early cyberpunk, the network often appears as a zone of transcendence. It is everywhere and nowhere, abstract yet inhabitable, technical yet mystical. The user who enters it gains access to a level of reality hidden from ordinary perception. The physical world becomes a surface manifestation of deeper informational flows. Power belongs to those who can move through those flows. The hacker, console cowboy, artificial intelligence, uploaded mind, or digital ghost becomes a figure of superior access. The Lawnmower Man translates this logic into cinematic spectacle. Jobe's desired escape into the network is a claim to omnipresence.

The modern metaverse inherits the same directional movement, though in commercial rather than gothic form. The ambition is not merely to make a compelling VR game. It is to make a persistent layer of reality that follows users across contexts. At first, this appears as virtual meeting rooms, games, avatars, and social spaces. Then it expands into work, education, commerce, fitness, design, simulation, and entertainment. With augmented reality, the ambition becomes still more expansive. The digital world no longer waits inside the headset. It overlays the physical world. The interface becomes ambient. The network becomes perceptual.

This movement from place to layer is crucial. A virtual world can be entered and exited. An augmented world surrounds the user continuously. The dream of ubiquity is fulfilled not by abandoning the physical world, but by instrumenting it. Information, navigation, communication, advertising, memory, and social signals can be placed over ordinary perception. The platform does not need to replace reality if it can annotate reality, filter reality, and monetize the user's pathway through reality. In this sense, mixed reality is more ambitious than classical virtual reality. It does not build a separate cyberspace. It seeks to become the operating system of everyday experience.

The Lawnmower Man remains relevant because its mainframe fantasy exposes the metaphysical desire beneath this evolution. The dream is not only better media. It is presence without locality. It is control without physical proximity. It is identity without stable embodiment. It is the ability to appear, act, influence, and persist across distributed systems. The old language of cyberspace imagined this as a dramatic escape from the body. The new language of platforms imagines it as seamless integration. But the direction is the same: the self becomes increasingly mediated by a network that promises extension while demanding dependency.

Ubiquity also changes power. A tool that is used occasionally can be ignored. A tool that becomes the environment cannot be ignored in the same way. If social life, work, education, commerce, and entertainment migrate into a platform's synthetic spaces, then exclusion from those spaces becomes exclusion from opportunity. The network ceases to be optional. It becomes civilizational furniture. Its rules become background conditions of life. Its owners become governors of practical reality.

The film expresses this danger through horror because Jobe's ubiquity is monstrous. He wants to be everywhere because everywhere means domination. Contemporary platforms express the same structural ambition through service language. They promise connection, interoperability, creativity, and convenience. Yet the political problem is unchanged. Whoever builds the default layer of presence acquires a form of power that exceeds ordinary product ownership. The dream of ubiquity is always also a dream of jurisdiction.

2.4 Horror Beneath the Interface

The Lawnmower Man is remembered for its early virtual-reality spectacle, but its lasting force comes from the horror beneath the interface. The film understands that the fantasy of synthetic reality is never innocent. Behind the glowing polygons and ecstatic immersion lies a question about what happens when the human subject becomes editable. If perception can be programmed, if embodiment can be redesigned, if intelligence can be amplified, and if identity can be moved into a network, then the boundary around the person becomes unstable. The horror is not that the machine fails. The horror is that it succeeds in ways that exceed moral control.

This distinguishes the film from simpler technology fantasies. In a purely optimistic version, virtual reality would be a tool of play, education, empathy, therapy, and creative expansion. In a purely reactionary version, it would be a corrupting illusion that must be rejected. The Lawnmower Man is more ambivalent. It recognizes the beauty of the dream. Its virtual spaces are crude by present standards, but they are charged with wonder. The film understands why a person would want to enter. It understands why leaving ordinary embodiment behind might feel like rescue. Its horror arises precisely because the dream is attractive.

The interface hides violence by converting it into experience. Experiments become sessions. Manipulation becomes training. Control becomes enhancement. Dissociation becomes transcendence. Jobe's body is not simply harmed from outside; his selfhood is reorganized through a system that presents itself as possibility. The machine does not need to torture him in the old sense. It seduces, stimulates, accelerates, and reconfigures. The horror is therefore intimate. The threat is not only death, but transformation into something that no longer shares the moral limits of the original person.

This theme is highly relevant to contemporary immersive systems because the interface is becoming more intimate. The history of computing has moved from room-sized machines to desktops, from desktops to laptops, from laptops to phones, from phones to wearables, and from wearables toward headsets, glasses, sensors, and biometric avatars. Each step brings computation closer to the body. Each step also brings measurement closer to perception, gesture, and emotion. The screen once sat across the room. The phone entered the hand. The

headset surrounds the eyes. The glasses sit on the face. The avatar imitates the person. The interface approaches identity.

As the interface approaches identity, horror becomes harder to see because it appears in friendly forms. It appears as convenience, personalization, realism, presence, and emotional fidelity. A photorealistic avatar seems like a triumph of communication. It may also become a biometric double whose expressions, micro-movements, and social performances are captured, modeled, and transmitted. An augmented-reality overlay seems like useful assistance. It may also become a system for ranking, labeling, advertising, and filtering the world before the user encounters it. A persistent virtual world seems like creative freedom. It may also become a privatized environment where speech, property, identity, and movement are governed by platform policy.

The horror beneath the interface is therefore not limited to spectacular dystopia. It is also administrative. It concerns terms of service, account suspension, asset ownership, behavioral data, biometric capture, psychological profiling, and the normalization of synthetic mediation. The metaverse does not need to produce a Jobe-like monster in order to fulfill the darker logic of The Lawnmower Man. It only needs to make embodied life increasingly dependent on systems whose operations users cannot fully inspect, contest, or escape.

The film's visual crudeness may actually sharpen this lesson. Because its virtual world looks artificial, the viewer is never allowed to forget that the environment is constructed. Contemporary interfaces aim to erase that awareness. They seek fidelity, seamlessness, natural interaction, and emotional believability. But the more natural the interface feels, the less visible its artificial governance becomes. A bad simulation announces itself as simulation. A good simulation disappears into habit.

This is the final cyberpunk lesson of The Lawnmower Man: the interface is not the opposite of power. It is one of power's most advanced forms. When the world is mediated, whoever controls mediation shapes what can be perceived, done, remembered, desired, and monetized. The film made that insight grotesque, loud, and mythic. The metaverse makes it smooth, social, and investable. Beneath the promise of presence remains the old horror: that humanity may enter the machine not as master, but as raw material for a new architecture of control.

3. Oculus and the Revival of Consumer Virtual Reality

3.1 Palmer Luckey and the Garage-Hardware Myth

Oculus entered the history of virtual reality through one of Silicon Valley's favorite origin stories: the garage-hardware myth. A young builder, dissatisfied with the failures of existing technology,

assembles a prototype from inexpensive parts, attracts online attention, mobilizes a community of enthusiasts, and appears to rescue a dormant technical dream from institutional stagnation. This story is not false, but it is incomplete. Its importance lies less in the literal garage than in the mythology it restored. Oculus made virtual reality feel possible again by reconnecting technical tinkering with an older cultural desire: to step through the screen and inhabit the computational world directly.

By the early 2010s, virtual reality carried the burden of disappointment. The 1990s had promised immersive cyberspace, but delivered expensive headsets, latency, nausea, crude graphics, limited content, and theatrical demonstrations that exceeded practical use. VR had become a symbol of premature futurism. It belonged to trade-show spectacles, military simulation, academic laboratories, arcade curiosities, and abandoned predictions. The dream survived, but mainly as nostalgia or niche research. Oculus changed this atmosphere by reframing VR as unfinished rather than failed. The problem was not that the dream had been wrong; the problem was that the hardware had arrived too early.

Palmer Luckey's importance was therefore symbolic as well as technical. He represented a generation that had inherited the imagery of 1990s virtual reality not as embarrassment, but as challenge. The crude polygonal cyberspaces of early films and games were not dead ends. They were promissory sketches. The fantasy of stepping inside a video game, walking through synthetic worlds, and experiencing digital presence as bodily presence remained powerful. Oculus revived that fantasy by giving it a plausible consumer pathway: lighter headsets, better displays, improved tracking, lower latency, developer kits, game-engine integration, and a community willing to build experiences before a mature market existed.

The garage myth also made Oculus appear culturally innocent. Unlike older corporate attempts at VR, Oculus seemed to emerge from enthusiasm rather than platform strategy. It was framed as a maker project, a gamer project, a developer project, and a revivalist project. Its early legitimacy came from the sense that it belonged to users who had waited decades for the promised future. This mattered because VR requires belief before it has a stable use case. A phone solves obvious communication problems. A laptop extends known office and creative practices. A VR headset asks the user to accept an altered relationship to body, room, screen, and social presence. It is not merely purchased; it is entered. Oculus succeeded early because it gathered believers.

Yet the innocence of the garage myth concealed the scale of what VR would require. Consumer virtual reality could not remain a hobbyist object indefinitely. It needed capital, supply chains, developer ecosystems, distribution, platform governance, content pipelines, identity systems, payment systems, and social integration. A convincing headset was only the first layer. The larger project required an environment in which people would have reasons to return. This is

where the Oculus story begins to shift from maker romance to platform history. The garage prototype opened the door, but the world beyond that door required institutions powerful enough to build and own synthetic social space.

This transition is central to the argument of the paper. Oculus began as the revival of an old dream: immersive presence through hardware. Facebook's acquisition changed the dream's context. VR was no longer only a game interface or enthusiast technology. It became a potential extension of a planetary social platform. The headset was not merely a window into artificial worlds. It could become a device for routing social life, labor, identity, and attention through a new computational layer. The garage myth made VR emotionally available again. The platform acquisition made it geopolitically and economically consequential.

3.2 The 1990s VR Imaginary Rebooted

Oculus did not invent the desire for virtual reality. It rebooted the 1990s VR imaginary under better technical conditions. That distinction is important because the cultural meaning of Oculus depended on inherited images: the helmet, the glove, the synthetic landscape, the embodied avatar, the game-world entered from within, the user turning the head and finding the digital world still there. These images came from cinema, arcade culture, cyberpunk fiction, computer magazines, military simulation, academic demos, and the early internet's mythology of cyberspace. Oculus made them feel contemporary again.

The 1990s imagined VR as both awkward and sublime. The hardware was bulky, the graphics primitive, and the applications limited, but the idea carried enormous metaphysical force. VR suggested that computing would cease to be symbolic manipulation at a distance and become environment. The user would not command the machine through typed instructions or mouse clicks alone. The user would be surrounded by the machine's world. This was a conceptual leap beyond ordinary graphical interfaces. It transformed computing from a tool into a place.

The Lawnmower Man belongs to this moment because it visualized VR as a zone of transformation. Its cybernetic landscapes, artificial bodies, and ecstatic sequences gave popular culture a memorable grammar for immersion. It was not alone. Other films, novels, games, and television programs contributed to the same atmosphere. But The Lawnmower Man crystallized a particular version of the fantasy: the user enters VR and is changed by it. The world inside the machine is not merely representational. It is developmental, erotic, dangerous, and quasi-religious. Oculus reawakened this expectation, even when its early marketing was more practical and game-oriented.

The rebooted 1990s imaginary differed from the original in one crucial respect: the internet had matured. In the early 1990s, cyberspace and VR were often imagined together, but the actual networks, graphics hardware, tracking systems, and consumer devices were not ready to unify

them. By the time Oculus appeared, networked life had become ordinary. Social media had normalized persistent identity, remote interaction, online status, digital reputation, and platform-mediated community. Game engines had matured. Graphics processors had advanced. Smartphones had driven display miniaturization and motion sensors. Broadband and cloud services had altered expectations of connectivity. The cultural dream could now attach itself to an ecosystem.

This is why Oculus felt less like an isolated device than a missing sensory organ for the networked age. The internet already had identity, commerce, social graphs, games, video, messaging, search, and advertising. What it lacked was convincing spatial embodiment. Oculus promised to supply that missing layer. Instead of looking at the internet, the user might enter a networked space. Instead of being represented by a profile picture, the user might appear as an avatar. Instead of communicating through posts, messages, and video windows, the user might share simulated rooms. The 1990s had imagined cyberspace as a destination. Oculus suggested that destination might finally become habitable.

The reboot also preserved the old contradictions. VR was marketed through wonder, but haunted by isolation. The headset promised presence while covering the user's eyes. It promised embodiment while replacing the body with a tracked substitute. It promised shared worlds while requiring expensive personal hardware. It promised natural interaction while depending on technical mediation more intense than any previous mass interface. These contradictions were not accidental. They were built into the dream from the beginning. The more completely the machine simulates presence, the more completely the user must submit to the machine's perceptual architecture.

The Oculus revival therefore should not be understood merely as a successful hardware story. It was the return of a cultural program: computing as inhabitable world. The 1990s gave that program its images. Oculus gave it a plausible development kit. Facebook gave it a platform owner. Meta later gave it a corporate doctrine. The old virtual-reality imaginary had not disappeared. It had waited for a company large enough to industrialize it.

3.3 Immersion as the New Interface

The deeper importance of Oculus was its proposal that immersion itself could become the next interface. Previous computing interfaces had organized interaction through symbolic distance. The user typed, clicked, tapped, scrolled, swiped, or spoke. The body remained outside the represented world. Even video games, despite their intensity, were usually mediated through screens and controllers. Oculus challenged that arrangement by shifting the interface from the hand and eye toward the sensorium as a whole. The user did not merely operate the system. The user occupied the system's perceptual field.

This is a major transformation in the history of computing. The command line asked users to know the machine's language. The graphical user interface translated computing into windows, icons, menus, and pointers. The smartphone compressed computing into touch, camera, microphone, motion sensor, and always-on connectivity. Virtual reality proposes something more enveloping: the interface becomes spatial experience. It surrounds the eyes, tracks the head, follows the hands, maps the room, positions sound, and increasingly measures bodily response. Interaction is no longer only a discrete command. It becomes posture, movement, gaze, orientation, and presence.

Immersion therefore changes what counts as data. In ordinary screen computing, the system can know what the user clicks, types, watches, shares, purchases, or pauses over. In immersive computing, the system can potentially know how the user moves through space, where attention lingers, how close one avatar stands to another, what gestures occur, what objects are approached, what environments cause hesitation, excitement, fear, or engagement. The interface becomes more natural to the user because it becomes more intimate with the body. This intimacy is the source of both VR's promise and its danger.

As an interface, immersion has great power because it reduces abstraction. A three-dimensional model can be inspected as if it were present. A trainee can practice a procedure in simulated space. A distant person can appear to share a room. A game can surround the player. An architectural design can be walked through before construction. A classroom can become a historical site, molecular structure, battlefield, operating room, or impossible geometry. These uses are not superficial. They show why immersion has remained compelling despite repeated market disappointments. Human beings are spatial creatures. To place information in space is to recruit ancient systems of attention, memory, orientation, and action.

But precisely because immersion recruits these systems, it has unusual persuasive power. The body tends to respond to virtual space before theory corrects the illusion. A simulated height can produce fear. A virtual object can invite avoidance. A nearby avatar can feel socially present. A room that does not exist can become a remembered place. This means immersive interfaces do not merely display information. They stage reality for the nervous system. They can train, habituate, reward, startle, soothe, arouse, and manipulate at a level deeper than ordinary media.

The Lawnmower Man exaggerated this through spectacle, but the principle remains accurate. Once the interface becomes immersive, the boundary between content and environment weakens. The user is not simply shown a message. The user is placed inside a designed condition. Advertising can become surrounding atmosphere. Social hierarchy can become spatial arrangement. Political persuasion can become simulated experience. Labor management can become virtual co-presence. Entertainment can become behavioral conditioning. Education

can become embodied memory. The interface is no longer a frame around the world. It is a world.

Oculus made this possibility feel newly concrete. Its early appeal was not that it perfected VR, but that it allowed enough immersion for the imagination to complete the rest. Users could turn their heads and experience continuity. They could sense scale. They could feel presence, however imperfectly. This was enough to reawaken the belief that a new interface epoch might be beginning. The headset became a threshold object. It said that the next interface would not be a smaller screen, but a simulated place.

The platform implications were enormous. A company that controls an immersive interface does not merely control an app store or content feed. It controls the conditions under which the user encounters synthetic space. It can define identity systems, avatar standards, object ownership, social rules, monetization paths, moderation practices, developer permissions, and sensory defaults. In this way, immersion as interface leads directly to immersion as governance. The more complete the interface becomes, the more complete the platform's authority over experience can become.

3.4 Why Facebook Bought the Headset

Facebook's acquisition of Oculus was often described as surprising because the connection between a social network and a virtual-reality headset seemed, at first glance, indirect. Facebook was a company of profiles, feeds, photos, likes, groups, ads, and mobile applications. Oculus was a hardware company associated with gaming and immersive simulation. Yet the acquisition becomes logical once Facebook is understood not as a website, but as a company organized around the capture and monetization of social presence. From that perspective, Oculus was not a strange purchase. It was an attempt to own the next form of presence before another platform did.

Facebook's original interface was the profile. The profile converted a person into a structured social object: name, image, relationship status, education, location, interests, posts, friends, memories, and preferences. The feed then converted social life into an algorithmically ordered stream. The company's power came from mediating what people saw of one another and from transforming those mediations into advertising value. It did not need to manufacture the content of human life. It needed to host, rank, analyze, and monetize it. Sociality became infrastructure.

By the time Oculus appeared, however, the feed model faced limits. Mobile computing had moved attention into apps and notifications, but the smartphone platform itself was controlled by other companies. Facebook had enormous software power but limited control over the operating system, device layer, and hardware conditions of user attention. A successful VR

platform offered a possible escape from that dependency. If Facebook could help define the next computing interface, it might no longer have to live inside someone else's mobile ecosystem. The headset was therefore not only a device. It was a strategic claim on the post-smartphone future.

The acquisition also reflected a broader anxiety common to dominant technology companies: the fear of missing the next platform shift. Companies that dominate one interface era can be weakened when computing moves elsewhere. Desktop leaders can miss mobile. Search companies can miss social. Social companies can miss immersive computing. Facebook's purchase of Oculus should be read partly in this defensive context. If virtual reality became important and Facebook did not own a position in it, social interaction might migrate into environments governed by competitors. Buying Oculus gave Facebook a foothold in a possible successor platform.

But the deeper reason was more ambitious. Facebook's business depended on social connection at scale, and VR promised a more intense form of connection than text, image, or video. The company could imagine replacing posts with presence, profiles with avatars, video calls with shared rooms, events with synthetic venues, and online communities with persistent virtual spaces. The social graph could become spatial. Friends would not merely appear in a feed; they could appear beside the user. Brands would not merely advertise; they could build environments. Workplaces would not merely communicate; they could occupy virtual offices. Commerce would not merely show products; it could stage them as interactive objects.

This was the bridge from Oculus to Meta. The headset allowed Facebook to imagine the platform after the feed. In that imagined future, the company would not simply mediate communication about life. It would host portions of life itself. The metaverse would be social media spatialized, embodied, and made persistent. The same underlying economic logic could expand into a richer domain: more signals, more engagement, more commerce, more identity, more behavioral data, and more dependency.

This is why the acquisition belongs to the lineage of The Lawnmower Man. The film imagined VR as a transformative environment in which the human subject could be remade and networked. Facebook recognized, in corporate form, that immersive environments could become a new social substrate. The company did not need the film's gothic language. It needed only the structural insight that the next frontier of computing might be presence itself. If presence could be mediated, presence could be organized. If presence could be organized, it could be monetized. If it could be monetized at planetary scale, it could justify a corporate transformation.

The purchase of Oculus therefore marks the hinge between consumer VR revival and platform metaverse strategy. Before the acquisition, Oculus represented the return of an old dream to enthusiasts, developers, and gamers. After the acquisition, it became part of a much larger question: who will own the architecture of synthetic presence? Facebook bought the headset because the headset might become the doorway. Later, Meta would try to build the world behind it.

4. Zuckerberg's Metaverse Turn

4.1 From Social Network to Social Infrastructure

Zuckerberg's metaverse turn is best understood as a shift from social network to social infrastructure. Facebook began as a system for representing social relations: profiles, friends, photos, posts, likes, groups, events, and feeds. It made human association visible, searchable, rankable, and monetizable. But the metaverse ambition extends beyond representing social life. It attempts to provide the environment in which social life occurs. This is a profound escalation. A social network mediates communication among people who remain elsewhere. Social infrastructure aspires to become the elsewhere.

In the feed era, Facebook organized attention around symbolic fragments of life. A person posted a photograph, message, link, memory, reaction, or update. Others encountered that fragment through algorithmic ordering. Sociality became a stream. The user did not need to be co-present with others; the platform converted asynchronous signals into a continuous sense of social awareness. This was powerful because it made friendship, family, politics, entertainment, advertising, and self-presentation available through one interface. The feed became a social nervous system.

Yet the feed still preserved a distinction between life and representation. People lived elsewhere and posted traces into the platform. They worked elsewhere, ate elsewhere, traveled elsewhere, attended school elsewhere, entered relationships elsewhere, and then uploaded fragments of those experiences. The platform mediated the record, commentary, and performance of life, but it did not fully host the spatial conditions of life. The metaverse attempts to reduce that gap. It asks whether meetings, classrooms, concerts, stores, games, worship, exercise, dating, art, therapy, and ordinary conversation can be moved from represented life into platform-hosted synthetic space.

This transition changes the nature of platform power. A social network governs visibility. It decides what appears, what is amplified, what is suppressed, what is recommended, what is remembered, and what is forgotten. Social infrastructure governs participation more directly. It defines the spaces where people gather, the forms in which they appear, the gestures available

to them, the assets they can own, the payments they can make, the rules they must obey, and the penalties for violation. The difference is comparable to the difference between owning a newspaper and owning the town square, the shops around it, the identity cards required to enter, and the recording devices embedded in the pavement.

The metaverse turn therefore represents an effort to spatialize the social graph. In Facebook's original architecture, relations were represented as links among accounts. In the metaverse, those relations can be staged as proximity, co-presence, shared objects, shared rooms, joint tasks, and embodied interaction. A friend list becomes a navigable world. A group becomes a venue. A message thread becomes a room. A profile picture becomes an avatar. A reaction becomes gesture, gaze, posture, or simulated touch. Social data becomes environmental design.

This is why Zuckerberg's metaverse rhetoric repeatedly emphasized presence. Presence is the missing dimension of feed-based social media. A post can inform. A photo can represent. A video call can connect. But none fully reproduces the feeling of being with another person in a shared space. The metaverse proposes to capture that feeling and make it programmable. If successful, the company would not merely know what people say to one another. It would mediate how they appear to one another, how they move around one another, and how they experience being together.

The shift from network to infrastructure also reflects a strategic response to platform dependence. Facebook became enormous inside the mobile ecosystem, but it did not control the dominant mobile operating systems. Its access to users remained mediated by device manufacturers, app stores, privacy rules, notification systems, and hardware constraints. A metaverse platform promised a way to move upstream, toward control of the device, interface, identity layer, developer ecosystem, and economic substrate. Zuckerberg's turn was therefore philosophical and defensive at once. It was a bid to define the next interface before the next interface could define Meta.

The Lawnmower Man comparison clarifies the stakes. In the film, the mainframe is not merely a machine. It is the hidden infrastructure into which Jobe seeks entry and command. In Meta's corporate version, the goal is not a single gothic mainframe but a distributed environment of headsets, avatars, mixed-reality devices, identity systems, social spaces, developer tools, and commerce layers. The ambition is not to depict cyberspace but to administer it. The social network showed people images of one another. The metaverse seeks to become the place where those images acquire bodies.

4.2 The Rebranding of Facebook as Meta

The rebranding of Facebook as Meta was more than a corporate name change. It was an attempted ontological repositioning. The company sought to move public understanding away

from a scandal-burdened social-media platform and toward a future-oriented computing company building the next stage of digital life. The new name performed several functions at once. It distanced the parent company from the narrower Facebook product. It signaled commitment to virtual and augmented reality. It invoked the metaverse as destiny rather than experiment. It also framed the company's existing social-media empire as merely the first stage of a larger project.

Rebranding matters because technology companies do not simply sell products. They sell inevitability. A successful platform narrative persuades users, investors, developers, regulators, employees, and competitors that a particular future is coming and that resistance is impractical. The name Meta attempted to claim this future linguistically. It implied that the company was no longer only one participant in digital culture, but a builder of the layer beyond ordinary digital media. The prefix "meta" suggests abstraction, self-reference, higher order, and a position above or beyond. As a corporate identity, it claimed altitude.

This altitude was necessary because Facebook's brand had become tied to the problems of the feed era: surveillance advertising, political manipulation, misinformation, polarization, privacy erosion, adolescent mental health concerns, moderation disputes, and reputational exhaustion. The metaverse offered a way to change the conversation. Instead of defending yesterday's platform, the company could invite the public to imagine tomorrow's world. This does not mean the metaverse was merely a distraction. It means the rebrand joined strategy with reputation management. The future became a way to escape the moral weight of the past.

The new name also allowed the company to unify several technologies under one myth. Virtual reality, augmented reality, social platforms, avatars, artificial intelligence, digital commerce, creator economies, gaming, remote work, and spatial computing could all be gathered beneath the metaverse label. Without such a label, these projects might appear fragmented. With it, they became components of a civilizational transition. The rebrand made hardware, software, identity, and commerce appear as parts of one historical movement.

This is characteristic of major technology narratives. They do not merely describe technical systems; they integrate them into a story of human progress. The personal computer promised individual empowerment. The web promised universal access to information. Social media promised connection. The smartphone promised always-available computing. The metaverse promised presence beyond distance, identity beyond the body, and social worlds beyond physical constraint. The rebranding of Facebook as Meta attempted to place the company at the center of that promise.

Yet the name also contained an unresolved contradiction. The metaverse was presented as open, creative, social, and expansive, but Meta was a single corporation with strong incentives

to own as much of the stack as possible. This tension is central to the project. The metaverse was marketed as a future environment for humanity, but its practical development depended on platforms, accounts, devices, standards, stores, payments, policies, and permissions. The rhetoric was civilizational; the structure was corporate. The name Meta universalized what remained, in practice, a proprietary ambition.

This contradiction echoes the cyberpunk pattern in which vast virtual spaces are described as emancipatory while being shaped by concentrated power. The user imagines entry into a boundless world, but the world has owners. It has gates, defaults, currencies, moderation systems, surveillance capacities, and economic incentives. The rebrand's grandeur therefore should be read critically. It did not simply announce a new direction. It attempted to naturalize the idea that a private advertising company could become a primary architect of synthetic reality.

The Lawnmower Man helps expose the metaphysical boldness of this move. In the film, the fantasy is that a human mind might enter the machine and expand into networked power. In Meta's rebrand, the fantasy is inverted: the company enters the culture's imagination and tries to expand outward into the future of human presence. Both movements involve a claim to a higher layer of reality. Jobe wants to transcend the human body through the network. Meta wants to transcend the social-media company through the metaverse. Both are acts of renaming as elevation.

4.3 Presence as Product

Presence is the central product of the metaverse. This is what distinguishes Meta's ambition from ordinary online communication. The company does not merely want people to exchange messages, images, videos, or reactions. It wants them to feel located with one another inside a shared synthetic condition. Presence is the sensation that another person, object, or environment is there with the user, even when the physical situation says otherwise. It is a psychological, perceptual, and social effect. Meta's project attempts to manufacture that effect, scale it, standardize it, and monetize it.

The importance of presence can be seen by comparing earlier media forms. Text allows thought to travel without the body. Photography allows appearance to travel without presence. Telephony allows voice to travel without face. Video allows face and voice to travel without shared space. Social media allows identity fragments to circulate without co-presence. Virtual reality attempts to make distance feel spatially overcome. It does not simply transmit signs of the other person. It stages the other person as an embodied participant in a surrounding world.

This is why avatars matter so much. The avatar is not merely decorative. It is the vessel through which presence becomes social. A poorly rendered avatar can still produce some sense of co-

presence if it moves, responds, gestures, and occupies space in relation to others. A photorealistic avatar intensifies the ambition by attempting to make the digital body socially convincing. The avatar becomes a proxy body, a performative mask, a biometric surface, and an economic asset. It mediates recognition. It carries identity. It turns the account into a figure.

Presence as product also explains the company's interest in both realism and stylization. Different contexts require different forms of presence. A workplace meeting may demand legibility, facial expression, professionalism, and trust. A game may demand fantasy, exaggeration, speed, and transformation. A social hangout may demand warmth and low friction. A concert may demand spectacle. A therapy or medical simulation may demand safety and emotional fidelity. The metaverse does not need one avatar form; it needs a system for modulating embodiment across contexts. The user becomes a portfolio of possible appearances.

The commercial implications are enormous. If presence can be manufactured, it can be sold in layers. Hardware sells access to immersive perception. Software sells environments. Avatar systems sell identity expression. Marketplaces sell clothing, skins, objects, spaces, tools, and enhancements. Enterprise platforms sell meetings, training, and collaboration. Developers sell experiences. Advertisers sell branded environments and behavioral influence. Data systems sell prediction and optimization. Presence becomes not one product but a stack of products built around the user's mediated body.

This marks a decisive escalation from the attention economy. Social media monetized what users looked at, clicked, shared, and lingered over. The metaverse could monetize where users stand, what they approach, how they gesture, what they avoid, whom they face, how long they remain near an object, how they react to a simulated environment, and how they perform identity in real time. The economic unit expands from attention to embodied behavior. The product is no longer only the user's gaze; it is the user's situated presence.

This is why the rhetoric of connection requires scrutiny. Presence sounds humane because it responds to genuine deficits of digital life. Remote communication is often flat, tiring, fragmented, and emotionally thin. Many people want more convincing forms of distance communication. Families separated by geography, remote workers, patients, students, artists, and collaborators may all benefit from improved telepresence. The problem is not that presence is false or worthless. The problem is that platform-mediated presence can become a new domain of extraction.

The Lawnmower Man dramatizes this in extreme form. Jobe's presence inside virtual reality is transformative, but it is also captured by the system that produces it. The machine gives him a new self while binding that self to its architecture. Meta's version is not gothic, but the

structural issue remains. To sell presence is to interpose a company between persons and the feeling of being together. If the company succeeds, it owns not merely a communication channel but an emotional condition of social life.

Presence as product therefore raises a political question disguised as a design problem. Who defines believable presence? Who controls the avatar standards? Who stores the biometric data? Who decides which bodies are permitted, optimized, ranked, sold, or excluded? Who moderates gestures, proximity, harassment, intimacy, and speech in synthetic space? Who owns the record of what occurred there? The more real presence feels, the more consequential these questions become.

4.4 The Platform Logic of Synthetic Worlds

Synthetic worlds are not merely digital scenes. They are governed environments. Every object, gesture, boundary, permission, currency, and identity marker in a synthetic world depends on decisions made by designers, developers, platform owners, and policy systems. This is why the platform logic of the metaverse must be taken seriously. A virtual world may appear playful or open, but it is structured from the beginning by authority. Someone defines what exists, what can be changed, what can be owned, what can be sold, what can be seen, and what can be removed.

The platform logic begins with identity. Users must enter through accounts, credentials, profiles, avatars, or device-linked systems. Identity determines access, reputation, continuity, property, social connection, moderation history, and economic participation. In a mature metaverse, identity would not be a minor feature. It would be the spine of the system. A user's avatar, purchases, contacts, workspaces, memories, permissions, and status would all depend on persistent identity management. This gives the platform enormous power because losing an account could mean losing not only speech access but embodied access to social and economic spaces.

The second layer is spatial governance. Synthetic worlds require rules of movement and interaction. Can users fly, walk, teleport, enter private rooms, touch objects, alter environments, block others, record interactions, or create persistent structures? Are spaces public, private, paid, age-gated, corporate, educational, erotic, religious, political, or military? Who enforces boundaries? What counts as trespass in a virtual room? What counts as assault when bodies are simulated? These questions show that synthetic space is not lawless. It is rule-saturated.

The third layer is economic design. Platforms rarely host worlds without monetization. They create marketplaces, currencies, transaction fees, subscriptions, premium features, advertising surfaces, creator revenue systems, and asset ownership models. The more people value their virtual identity and environment, the more money can flow through the platform. A jacket for

an avatar, a meeting room, a virtual sculpture, a concert ticket, a training simulation, a branded world, a productivity tool, or an augmented overlay can all become products. Synthetic worlds transform imagination into inventory.

The fourth layer is behavioral measurement. Because virtual and mixed-reality systems must track user activity in order to function, they generate data that can be economically and politically valuable. The system may know where users look, how they move, what they touch, which environments retain them, which avatars attract them, which interactions disturb them, and which stimuli modify behavior. Even if not all data are stored or exploited, the technical capacity alters the relationship between user and platform. Synthetic worlds are not only experienced; they are instrumented.

The fifth layer is developer dependence. A platform becomes powerful when others build inside it. Developers, artists, educators, employers, performers, brands, and institutions may create experiences that increase the platform's value. But they do so within the platform's rules. They depend on its tools, standards, revenue shares, discovery systems, moderation policies, and technical roadmap. This creates an ecosystem that appears decentralized in content but centralized in governance. Many worlds may exist, yet their existence remains conditional on the platform that hosts or connects them.

This is the platform logic Meta sought to command. The company's metaverse ambition was not merely to build one popular virtual room or one headset. It was to shape the stack: hardware, operating system, avatars, social graph, developer tools, content marketplace, advertising logic, payment rails, and mixed-reality interfaces. The reward for controlling the stack would be extraordinary. The platform owner would not need to create every experience. It would profit from enabling, ranking, taxing, and governing the experiences of others.

This is where the metaverse becomes politically charged. Synthetic worlds are often described as imaginary, but their consequences are real. If work meetings occur there, labor relations are affected. If education occurs there, pedagogy and access are affected. If commerce occurs there, money and property are affected. If political speech occurs there, public discourse is affected. If intimate relationships occur there, sexuality, trust, and vulnerability are affected. If children use such spaces, development and safety are affected. The unreality of the environment does not make its governance less important. It makes governance more hidden.

The Lawnmower Man provides a useful symbolic warning because its virtual world is never merely a world. It is an apparatus built by institutions with motives. Jobe's transformation occurs inside a designed system, and the system's design cannot be separated from power. The contemporary metaverse replaces the laboratory with the platform and the experiment with the user base. The result is less visibly sinister, but vastly more scalable.

Zuckerberg's metaverse turn therefore represents the attempt to platform synthetic reality before synthetic reality becomes unavoidable. It is not enough to build an application; the ambition is to define the environment in which applications, identities, economies, and social relations appear. In the old internet, users logged onto platforms. In the metaverse vision, users enter worlds whose conditions are platform-native from the beginning. The platform is not a destination inside reality. It becomes the architecture through which reality is increasingly encountered.

5. Horizon Worlds and the Uncanny Failure of Early Embodiment

5.1 Floating Avatars and the Comedy of Leglessness

Horizon Worlds became culturally important less because of what it achieved than because of what it accidentally revealed. Its early avatars, often shown as floating torsos without legs, were widely mocked as symbols of a future that looked unfinished before it had arrived. The comedy was immediate. A company promising the next stage of human presence had produced bodies that did not possess bodies in the ordinary sense. Users could gather, talk, gesture, and occupy simulated environments, but their lower halves were absent. The result appeared less like a revolutionary social platform than a corporate puppet show suspended in empty space.

This embarrassment matters because embodiment is not a superficial detail in virtual reality. The metaverse is not simply a chat room with scenery. Its central promise is that users will feel present with one another in shared synthetic spaces. To feel present, the user must have some plausible relation to a body. That body need not be photorealistic, anatomically complete, or physically realistic in every respect. Games and animated worlds have long shown that stylized bodies can be socially convincing. But some form of bodily coherence is required. A floating torso can communicate, but it also reminds the user that the system has not solved the basic problem it claims to organize: how to place a person in a world.

The leglessness of early Horizon avatars became funny because it condensed a vast technological and metaphysical gap into one visual failure. The company's rhetoric pointed toward the future of work, friendship, collaboration, entertainment, and identity. The avatar's body pointed backward toward technical limitation, design compromise, and awkward artificiality. The gap between promise and presentation was too large to ignore. The viewer saw not the future of human connection, but the anxiety of a corporation trying to make synthetic embodiment arrive on schedule.

Legs are difficult in virtual reality because the system must infer bodily movement from limited sensors. A headset tracks the head. Controllers track the hands. Some systems track additional points, but ordinary consumer hardware does not automatically know the exact position of

knees, feet, hips, weight shifts, posture, or gait. To render legs convincingly, the system must estimate, model, or invent them. Badly rendered legs may be worse than no legs because they can produce uncanny mismatch. A floating torso is absurd, but a body whose legs move incorrectly can be disturbing. The missing legs were therefore not merely a design oversight. They exposed the technical problem of reconstructing a whole social body from partial data.

Yet the cultural reaction exceeded the technical explanation. People laughed because the missing legs violated the grandeur of the metaverse pitch. A modest VR chat application could have survived such awkwardness. A planetary company rebranding itself around the next epoch of computing could not. The legless avatar became an emblem of overclaim. It showed the public that Meta's synthetic social world remained closer to prototype than civilization. The company had announced an architecture of the future while displaying bodies that looked less complete than characters from decades-old animated media.

This is where The Lawnmower Man comparison becomes especially sharp. The film's early-1990s computer graphics are crude by modern standards, but they belong to a period when crudeness was expected. Horizon Worlds, by contrast, arrived after decades of advances in game engines, animation, graphics processors, motion capture, cinematic CGI, and online worlds. Its awkwardness therefore felt regressive. It did not merely fail to look futuristic. It seemed to resurrect the primitive cyber-aesthetic of the early VR imaginary. The metaverse appeared trapped inside the visual language of the films that had once fantasized it.

The comedy of leglessness also reveals the arrogance of abstraction. Platform companies often think in terms of networks, users, engagement, accounts, identity systems, markets, and developer ecosystems. But humans encounter one another as bodies. Legs matter not because every conversation requires seeing feet, but because bodily completeness signals that a person occupies space in a recognizable way. Walking, standing, leaning, turning, retreating, approaching, dancing, balancing, and sitting are social acts. A body without legs may still speak, but it has been stripped of much of its ordinary social grammar.

This failure was uncanny because it made the avatar hover between person and icon. It was too embodied to be a profile picture, but not embodied enough to be a social body. It could gesture, but not fully inhabit. It could represent a user, but not convincingly replace the user's physical presence. The floating avatar therefore occupied an awkward middle zone: more intimate than a screen name, less credible than a body. That middle zone is the unresolved territory of the metaverse itself.

5.2 Low-Resolution Utopia

Horizon Worlds also revealed the problem of low-resolution utopia. Meta's metaverse rhetoric invited users to imagine expansive futures: persistent social worlds, remote workspaces,

creative economies, concerts, games, education, collaboration, and embodied digital life. The actual visual presentation often looked sparse, cartoonish, and underpowered. The mismatch was not simply aesthetic. It raised a philosophical question: can a degraded visual world credibly serve as the next home of human presence?

Low-resolution environments are not automatically failures. Some of the most successful digital worlds have used stylized graphics, simplified geometry, or deliberately cartoon-like design. Visual abstraction can increase accessibility, reduce hardware burden, support creativity, and avoid the uncanny valley. The problem with Horizon Worlds was not merely that it looked simple. The problem was that its simplicity did not feel like an artistic choice strong enough to support the civilization-scale claims around it. The world looked less designed than constrained. It seemed optimized not by imagination but by technical and corporate caution.

A low-resolution utopia is a contradiction because utopia depends on enchantment. People do not migrate into synthetic spaces only because the spaces function. They migrate when those spaces feel meaningful, desirable, socially alive, and imaginatively superior to available alternatives. The metaverse pitch asked people to accept that the future of social life might occur in cartoon offices, empty plazas, branded environments, and simplified meeting rooms. But if the synthetic world is less beautiful, less rich, less socially dense, and less sensorially rewarding than ordinary life, the migration argument weakens. Why enter a worse world?

This question is especially damaging for a company whose existing platforms already colonized attention through frictionless convenience. Facebook and Instagram did not need users to wear equipment, clear rooms, charge controllers, adjust straps, tolerate motion discomfort, or appear as cartoon torsos. They lived on devices people already carried. Horizon Worlds required more effort while often providing less immediate reward. The world did not merely have to be interesting. It had to be interesting enough to overcome physical inconvenience and social embarrassment. Low-resolution utopia struggled to meet that threshold.

The early visuals also exposed a tension between corporate safety and imaginative risk. Truly compelling virtual worlds often emerge from strong aesthetic commitments, subcultures, game communities, artistic experimentation, or forms of play that exceed corporate smoothness. Horizon Worlds frequently felt managerial. It appeared as a safe, moderated, brand-compatible environment designed to offend no one and astonish no one. The result was a synthetic world with too little danger, too little weirdness, too little desire, and too little myth. Cyberpunk without darkness becomes a product demo. Utopia without beauty becomes an office park.

The Lawnmower Man was visually crude, but it was not emotionally cautious. Its virtual spaces were excessive, eroticized, threatening, mystical, and strange. They were not realistic, but they carried symbolic intensity. Horizon Worlds often suffered from the opposite problem. Its

graphics were more advanced in technical terms than the film's early CGI, but its worlds often felt less mythically charged. The film's artificiality served a fever dream. Horizon's artificiality served a platform strategy. The difference matters. People can forgive crude worlds that feel alive. They are less forgiving of crude worlds that feel administratively empty.

Low-resolution utopia also reveals an economic contradiction. The metaverse was pitched as an environment for human flourishing, but it had to run on consumer hardware at scale, preserve comfort, maintain performance, support moderation, enable user-generated content, and avoid the risks of photorealistic misconduct. The more visually ambitious the world, the more expensive and technically demanding it becomes. The more socially free the world, the more difficult it becomes to govern. The more realistic the bodies, the greater the risks of harassment, impersonation, surveillance, and emotional harm. Simplification is therefore not accidental. It is a compromise imposed by the platform model itself.

This compromise produces the uncanny banality of many early metaverse spaces. They are not dreams. They are compliance-compatible dreams. They do not feel like raw imagination, but like imagination passed through legal, safety, hardware, advertising, and public-relations filters. The user encounters a world that wants to be open-ended while constantly revealing its constraints. It is a playground built by a risk department.

The low-resolution problem therefore should not be dismissed as a temporary graphics issue. It points to a deeper uncertainty about whether corporate metaverse platforms can generate worlds people actually want to inhabit. Technical realism may improve. Avatars may gain legs. Headsets may become lighter. Environments may become richer. But the question of desire remains. A world must be more than accessible. It must be worth entering. Horizon Worlds became a warning that the metaverse cannot be built from infrastructure alone. It needs enchantment, danger, beauty, social density, and cultural meaning. Without those, it is not cyberspace. It is a waiting room with avatars.

5.3 The 1990s CGI Echo

The visual resemblance between early Horizon Worlds and 1990s CGI was not exact, but it was culturally resonant. Viewers did not need technical precision to sense the echo. Floating bodies, simplified geometry, plastic surfaces, empty synthetic spaces, and stiff social presence recalled the era when virtual reality was first sold as a glimpse of the future. The irony was severe. Meta's project was supposed to show what had changed since the 1990s. Instead, many people saw what had not changed enough.

The 1990s CGI echo matters because visual style carries historical memory. Early computer-generated environments were not just primitive technical artifacts. They became the look of a particular kind of futurism: abstract, polygonal, weightless, neon, empty, and grandiose. That

look promised transcendence while revealing limitation. It suggested that computers could create worlds, but not yet worlds with texture, density, or human warmth. The Lawnmower Man embodied this aesthetic. Its VR sequences looked artificial, but the artificiality was itself the point. Cyberspace was imagined as a separate order, not a perfect replica of ordinary life.

When Horizon Worlds unintentionally revived aspects of this look, it collapsed three decades of progress into a single visual joke. Audiences accustomed to cinematic CGI, richly detailed games, and sophisticated animation expected more from a company investing heavily in the metaverse. Instead, they saw a future that looked strangely older than the present. The comparison became damaging because other media had already trained users to expect high-quality digital embodiment. A modern video game character could have hair, cloth physics, facial expression, posture, and legs. Meta's avatars, presented as the future of social presence, often looked less convincing than entertainment products that did not claim to replace physical co-presence.

This gap reveals a difference between controlled media and open social platforms. A film sequence can be rendered, edited, and perfected. A game can optimize bodies and environments within known constraints. A social VR platform must support real-time interaction, user-generated variation, network synchronization, safety tools, accessible hardware, and broad scalability. The problem is harder than making a beautiful trailer. But the user judges the result, not the engineering difficulty. If the world looks crude, the dream looks crude.

The 1990s echo also reintroduced the camp quality of early VR. The original VR imaginary was often unintentionally theatrical. People wore large headsets, waved their arms, inhabited abstract worlds, and spoke in grand language about cyberspace, intelligence, and transcendence. The distance between the rhetoric and the visible experience created camp: seriousness rendered absurd by imperfect embodiment. Horizon Worlds repeated this structure. Executives spoke of connection, presence, and the future of work while appearing as simplified avatars in environments that looked less like destiny than a children's educational game.

This camp effect is not merely ridicule. It is diagnostic. It reveals when a technological mythology is overextended. A technology becomes comic when its symbols of power fail to support the authority claimed for them. The floating avatar is funny because it wants to be the human future but cannot find its own feet. The low-poly plaza is funny because it wants to be civilization but resembles a prototype. The executive avatar is funny because it wants to embody visionary leadership but appears as a toy version of authority. Comedy punctures platform inevitability.

The Lawnmower Man was also vulnerable to camp, but it benefited from being a horror fantasy. Its excesses belonged to its genre. Horizon Worlds had no such protection. It was a corporate environment asking to be taken seriously as infrastructure. This made its visual awkwardness more politically consequential. The viewer was not only laughing at bad graphics. The viewer was laughing at an attempt to claim the future.

The 1990s CGI echo further suggests that virtual reality's deepest problem has always been embodiment, not display alone. Better screens, faster processors, and improved tracking can reduce friction, but the challenge of making users feel socially present in artificial bodies remains profound. The avatar must be expressive without being uncanny, customizable without being meaningless, safe without being sterile, scalable without being empty, and computationally efficient without looking dead. The early metaverse struggled because each of these requirements pulled against the others.

This explains why the echo of The Lawnmower Man was so powerful. The film's virtual bodies were uncanny because they dramatized the dream of escaping ordinary flesh. Horizon's avatars were uncanny because they failed to supply convincing digital flesh in the first place. Both point to the same unresolved question: what kind of body belongs in cyberspace? A symbolic body? A realistic body? A fantasy body? A corporate-safe body? A biometric double? A cartoon? A ghost?

The metaverse cannot evade this question. It can postpone it through stylization, humor, or incremental improvement, but embodiment remains its central test. A social world requires bodies because social meaning is embodied. The 1990s CGI echo showed that Meta had revived the old VR dream without yet resolving the old VR body problem. The dream returned, but so did its unfinished anatomy.

5.4 Why Bad Graphics Can Still Reveal Deep Ambition

Bad graphics can be more revealing than polished demonstrations. A polished demo shows what a company wants the public to imagine. An awkward prototype shows what the company is willing to claim before the technology can fully support it. Horizon Worlds was revealing because its visual limitations exposed the scale of Meta's ambition. The company was not merely trying to build a game, chat application, or collaboration tool. It was trying to normalize the idea that crude synthetic presence could be an early version of the future of human association.

This is why the ridicule did not invalidate the project as an object of analysis. On the contrary, it made the project clearer. The gap between poor embodiment and enormous investment showed that Meta was thinking beyond immediate user delight. It was betting on infrastructure, habit formation, developer ecosystems, hardware iteration, and long-term platform control. The

early world did not have to be perfect if it could establish the category, gather developers, train users, and position Meta as the company most identified with immersive social computing. Bad graphics were embarrassing, but they did not contradict the ambition. They revealed the ambition's patience.

Many transformative technologies begin awkwardly. Early cinema was technically limited compared with later film. Early websites were ugly. Early mobile interfaces were clumsy. Early video calls were unstable. Early social media pages were crude. It would therefore be simplistic to conclude that Horizon Worlds failed historically because it looked bad at first. The more important issue is whether the early awkwardness belongs to a path of genuine maturation or exposes a mistaken assumption about user desire. Some crude technologies improve and become indispensable. Others remain crude because the underlying behavior never becomes necessary.

Meta's bet was that synthetic co-presence would become necessary. If that bet is correct, early graphical weakness will be remembered as transitional. If the bet is wrong, the weakness will be remembered as symptomatic: a sign that the company mistook a speculative interface for an inevitable social destination. The difference cannot be determined by graphics alone. It depends on whether users come to prefer mediated embodiment for enough domains of life to sustain a platform.

Bad graphics also reveal the priority of control over beauty. A company building a metaverse platform may care less about making the most aesthetically intense world than about building the most governable, scalable, extensible, and monetizable one. A visually wild, user-driven, subcultural environment may produce stronger desire but weaker corporate control. A safer, simpler world may be less exciting but easier to moderate, brand, and integrate into enterprise use. Horizon Worlds often looked bland because blandness serves certain institutional needs. It is easier to sell a sterile metaverse to employers, schools, advertisers, and regulators than a chaotic cyberpunk dream.

This helps explain why corporate metaverse spaces can feel less alive than older virtual communities. Online worlds, multiplayer games, modding cultures, and social platforms often thrive on unpredictability. They develop slang, rituals, economies, hierarchies, scandals, aesthetics, and forms of play that were not fully designed by the platform owner. Corporate metaverse projects, by contrast, often try to pre-package social life before it emerges. They want community without loss of control, creativity without danger, embodiment without erotic unpredictability, commerce without fraud, expression without reputational risk, and scale without disorder. The result can be visually clean and socially dead.

The Lawnmower Man reminds us that the old VR dream was never clean. It was excessive, unstable, and dangerous. Its virtuality was charged by the possibility that the user might become something uncontrollable. Meta's early metaverse imagery often lacked that charge. It tried to turn cyberpunk into a workplace. Yet the ambition remained radical beneath the blandness. Even a sterile synthetic world becomes politically significant if it is meant to host labor, identity, commerce, education, and social connection.

Bad graphics therefore function like a crack in the promotional surface. Through that crack, one can see the infrastructure being attempted: avatar systems, social spaces, behavioral tracking, digital goods, remote collaboration, platform governance, and eventual integration with augmented reality. The crude visual layer distracts from the deeper architectural project. A floating torso may look ridiculous, but it still represents an account, a person, a potential customer, a data source, a social node, and a future worker in synthetic space. The body is incomplete, but the platform logic around it is not.

This is the central lesson of Horizon Worlds. Its visual failures made the metaverse easy to mock, but they also clarified what Meta wanted to own. The company was not simply selling a beautiful world. It was trying to build the conditions under which future worlds, bodies, meetings, goods, and identities might be routed through its systems. The bad graphics were not the opposite of ambition. They were ambition arriving before beauty, before cultural legitimacy, and before the public had agreed that it wanted to live this way.

The comparison with The Lawnmower Man becomes most precise here. The film's crude CGI did not prevent it from expressing a powerful metaphysical fantasy. Horizon Worlds' crude avatars did not prevent Meta from expressing a powerful infrastructural fantasy. In both cases, the surface appears laughable until one recognizes the seriousness beneath it. The joke is the doorway. Behind it stands the old dream: to make the human being enter the machine, appear there as a body, and accept that the mediated world is not a supplement to reality but one of its future locations.

6. Codec Avatars and the Photorealistic Self

6.1 The Avatar as Biometric Double

Codec Avatars represent a decisive shift in the history of digital embodiment. Earlier avatars could be understood as masks, icons, characters, costumes, or symbolic representatives. They did not need to reproduce the user with anatomical or emotional fidelity. A cartoon body, stylized figure, game skin, animal form, robot, fantasy creature, or floating torso could serve as a social marker. The avatar stood in for the user without claiming to be the user. Photorealistic avatar research changes this relation. The avatar becomes less a mask than a biometric double:

a computational reconstruction of the person's visible self, designed to preserve facial structure, expression, gaze, movement, and social recognizability.

This is an important threshold. A stylized avatar can be playful because its distance from the user is obvious. It creates room for irony, experimentation, concealment, and fantasy. A photorealistic avatar narrows that distance. It claims continuity with the face, voice, posture, and expressive habits of the person outside the system. It does not merely say, "This represents me." It begins to say, "This is how I am present." The distinction is subtle but profound. The avatar moves from chosen symbol to captured likeness.

The biometric double depends on a dense technical chain. The user must be scanned, modeled, tracked, compressed, transmitted, rendered, and animated. Facial geometry becomes data. Skin texture becomes data. Eye movement becomes data. Micro-expression becomes data. Voice and timing become data. The living face is translated into a computational object capable of appearing in synthetic space. In ordinary photography, the captured face becomes an image. In photorealistic telepresence, the captured face becomes an active interface.

This active interface carries social force because human beings are exquisitely sensitive to faces. The face is not just a body part. It is a social field in which recognition, trust, intimacy, fear, deception, authority, vulnerability, and emotion are negotiated. A realistic digital face therefore cannot be treated like an ordinary graphic asset. It enters the domain of identity itself. To model the face is to model one of the primary surfaces through which the self becomes available to others.

The ambition of Codec Avatars is understandable. Current remote communication remains thin. Video calls flatten presence into rectangles, often with poor gaze alignment, awkward delays, lighting problems, and limited spatial context. A high-fidelity avatar could allow distant persons to appear co-present without requiring cinematic camera setups or travel. Families, physicians, teachers, collaborators, performers, and remote workers could benefit from a form of mediated presence that feels less fragmented than video. The appeal is real because the deficit is real. Digital communication often fails at the level of embodied nuance.

But the biometric double also creates a new class of risks. A cartoon avatar can be stolen, copied, mocked, or misused, but a photorealistic avatar can be impersonated. It can be made to say or do things that implicate the person's identity more directly. It can erode the evidentiary value of appearance. It can transform likeness into infrastructure. It can create new pressures to maintain a digitized version of oneself for work, social life, customer service, education, or performance. The more convincing the avatar becomes, the harder it is to treat it as merely fictional.

This is why the avatar as biometric double belongs to the same lineage as The Lawnmower Man. Jobe's virtual form is not a neutral representation. It is a site of transformation and power. In Meta's photorealistic version, the horror is quieter. The user is not necessarily becoming a digital god. The user is becoming a high-resolution object within a platform's representational system. The dream of exact presence requires the conversion of the body into manipulable code.

The biometric double also changes ownership questions. Who owns the scan? Who controls the model? Can it be exported? Can it be deleted? Can it be inherited? Can it be used after death? Can an employer require it? Can a platform suspend it? Can advertisers target it? Can artificial intelligence animate it in the user's absence? Can a realistic likeness be merged with synthetic speech, generated gestures, or predictive behavior? The photorealistic avatar does not simply improve the interface. It creates a new legal, ethical, and metaphysical object: a person-like digital asset derived from the body.

This object will not remain confined to entertainment. The more accurate the avatar becomes, the more plausible it becomes for professional meetings, medical consultation, education, therapy, legal proceedings, sales, political communication, religious gatherings, and intimate relationships. In each domain, the avatar's realism increases both utility and danger. Trust improves because the person seems present. Manipulation improves for the same reason. The biometric double is powerful because it borrows the authority of the face.

Thus Codec Avatars mark a deeper stage of the metaverse than Horizon Worlds' cartoon bodies. The cartoon avatar asks whether people will accept social presence through simplified embodiment. The photorealistic avatar asks whether people will allow platforms to reconstruct their embodied identity with enough fidelity to substitute for physical presence. The first problem is adoption. The second is ontological capture. Once the face becomes platform-native, the self has crossed a threshold.

6.2 Face, Voice, Gesture, and Emotional Capture

The photorealistic avatar is not only a visual project. It belongs to a larger movement toward the capture of expression. Face, voice, gesture, posture, gaze, timing, and emotional response are increasingly treated as computable signals. The goal is not merely to transmit words across distance, but to transmit the embodied conditions that make communication feel human. A realistic avatar without expressive motion would be a corpse. The avatar becomes socially alive only when the system captures and reproduces the subtle dynamics of the person.

This makes emotional capture central to the metaverse. In ordinary conversation, much of meaning arrives through nonverbal channels. A pause may indicate hesitation, contempt, sadness, calculation, or care. Eye contact may invite trust or signal dominance. A smile may be

sincere, nervous, strategic, or forced. A lean forward may show interest. A turn away may show withdrawal. A raised eyebrow may alter the meaning of a sentence. Human communication is not reducible to language. It is a bodily event.

Immersive telepresence attempts to encode this bodily event. To do so, it must measure and model signals that were previously difficult to capture at scale. Headsets, cameras, microphones, sensors, and machine-learning systems can infer where the user is looking, how the face is moving, how the voice changes, how the hands gesture, and how the body occupies space. The richer the representation, the richer the data required. Presence becomes expressive because capture becomes intimate.

This creates a paradox. Users want emotional fidelity because emotional fidelity makes mediated interaction less sterile. A remote grandmother wants the child's face to feel alive. A physician wants to read distress. A teacher wants to sense confusion. A colleague wants to know whether a proposal is understood. A friend wants warmth rather than a frozen video tile. The humane case for expressive telepresence is strong. Communication without expression is impoverished.

Yet the same expressive fidelity can produce unprecedented behavioral data. Platforms that mediate embodied communication may be able to analyze affective patterns, social confidence, stress responses, attraction, boredom, confusion, anger, compliance, and vulnerability. Even when such inferences are imperfect, their economic value may be considerable. Advertising has long wanted to know not merely what people see, but how they respond. Immersive systems bring response measurement closer to the body.

The face is especially sensitive because it mediates involuntary and semi-voluntary expression. A person can choose words carefully, but micro-reactions, gaze shifts, and timing may reveal more than intended. A platform that captures high-resolution facial dynamics enters the territory of affective surveillance. This need not look like authoritarian monitoring. It may arrive as product improvement, meeting analytics, wellness feedback, personalization, avatar realism, safety detection, or engagement optimization. The language will be benign. The data category remains intimate.

Voice deepens the problem. Voice carries identity, emotion, health, age, accent, class, fatigue, confidence, and social relation. A photorealistic avatar paired with a realistic voice becomes a persuasive proxy for personhood. If synthetic voice generation is added, the avatar can potentially speak when the user is absent. This raises questions beyond privacy. It raises questions about agency. When does a digital double stop transmitting the person and begin simulating the person? When does convenience become impersonation? When does automation become posthuman ventriloquism?

Gesture adds another layer. Hands and posture are central to social meaning, work, teaching, performance, and intimacy. A person explaining a concept uses hands to structure thought. A performer uses gesture to command attention. A friend uses posture to signal comfort. A worker uses body position to show engagement or fatigue. Capturing gesture enables richer communication, but also creates records of embodied behavior. The body becomes legible to the platform in motion.

The emotional dimension of this capture recalls The Lawnmower Man because the film understands VR as a technology that acts on desire, fear, aggression, pleasure, and self-image. It is not a cold interface. It is a machine for reorganizing affect. Modern metaverse systems are less theatrical, but they operate in the same general zone. They do not merely deliver information. They attempt to create felt presence, emotional response, and social immersion. The user is not just a viewer. The user is affectively positioned.

This is why the transition from social media to metaverse is so consequential. Social media already captured attention and reaction through likes, shares, comments, dwell time, and social graphs. The metaverse could capture embodied affect: not only what the user chooses to post, but how the user appears while interacting. This is a richer and more dangerous substrate. It shifts the platform economy from declared preference toward enacted presence.

A society that normalizes emotional capture must decide what kinds of interiority remain unmeasured. The right to privacy has usually been imagined in terms of information: names, addresses, messages, records, images, and transactions. Immersive systems force a broader view. Privacy must include the right not to have one's bodily expressivity continuously translated into platform data. The face is not merely content. The gesture is not merely input. The voice is not merely audio. They are parts of lived personhood.

The promise of Codec Avatars is that mediated communication might regain some of the warmth lost in digital life. The danger is that the warmth itself becomes instrumented. The platform does not only carry emotion; it can analyze, shape, store, and monetize the conditions of emotional exchange. This is the hidden transaction beneath photorealistic presence: the user receives a more human interface by surrendering more of the human to computation.

6.3 Telepresence and the Collapse of Distance

Telepresence is the noble face of the metaverse. It promises to reduce the tyranny of distance. People separated by geography might meet as though they were together. Families could gather without travel. Physicians could consult with patients across regions. Engineers could inspect shared models. Teachers could bring students into historical, scientific, or artistic environments. Remote workers could recover some of the spatial and emotional cues lost in video conferencing. In this version, the metaverse is not escapism. It is a prosthesis for presence.

This promise should be taken seriously. Human beings suffer from separation. Distance imposes costs measured in money, time, fatigue, loneliness, missed opportunities, and social fragmentation. The modern world already depends on mediated presence through letters, phones, video calls, messaging, and social media. Each medium collapses distance in a different way while leaving something behind. Text preserves thought but loses voice. Voice preserves tone but loses face. Video preserves face but loses shared space. Virtual reality attempts to recover the spatial dimension of being together.

The collapse of distance is especially powerful for work. Modern organizations are increasingly distributed, yet many forms of collaboration remain spatial. People gather around diagrams, prototypes, whiteboards, machines, maps, surgical plans, architectural models, molecular structures, design mockups, and logistical systems. Video calls can display these objects, but they do not easily allow participants to inhabit them together. Immersive telepresence could make shared objects spatially manipulable. It could let collaborators point, walk, inspect, scale, annotate, rehearse, and remember in ways closer to physical co-presence.

Education also benefits from spatialized learning. Students can read about a cell, temple, battlefield, engine, glacier, courtroom, or planetary system, but immersive environments can make scale and relation more intuitive. The value is not that simulation replaces books or teachers. The value is that some knowledge is spatial and procedural. The body learns by orientation, repetition, and action. Telepresence allows teachers and students to share impossible spaces: inside a molecule, across geological time, within an ancient city, or through a machine.

Medicine, therapy, disability access, and elder care provide additional humane cases. A patient who cannot travel may still meet a specialist in a richer environment than a phone call. A person with limited mobility may experience social, artistic, or educational spaces otherwise inaccessible. Rehabilitation can use simulated tasks. Exposure therapy can use controlled environments. Elderly persons separated from family may experience more emotionally satisfying contact. These possibilities are not fantasies. They represent the best moral argument for immersive computing.

Yet the collapse of distance also produces a collapse of boundaries. When presence can be simulated anywhere, the expectation of availability may expand. Work can enter the home more completely. Employers may ask for embodied participation rather than accepting ordinary remote communication. Schools may require platform access. Families may pressure one another into mediated gatherings. Social obligation may become more immersive. The escape from distance can become the erosion of refuge.

Telepresence also creates ambiguity about what kind of presence counts as sufficient. If a realistic avatar can attend a meeting, is physical attendance less necessary? If an AI-assisted avatar can summarize or represent a person's position, is the person required? If a deceased relative's likeness can be animated, is memory changed into interaction? If a politician can appear simultaneously in many virtual venues, what happens to accountability and authenticity? The collapse of distance can become the collapse of presence into representation.

The Lawnmower Man imagined distance overcome through entry into the network. Jobe's ambition was not simply to communicate, but to become distributed. Modern telepresence begins more modestly. It asks people to meet across space. But the underlying trajectory is similar: the person becomes less tied to one physical location and more dependent on mediated appearance. To appear somewhere no longer requires being there. This is useful, but it changes the meaning of "there."

The politics of telepresence depend on who controls the infrastructure. A public or open telepresence system might expand access. A privately owned platform can turn the collapse of distance into a toll road for human presence. Travel costs may decline, but platform dependence increases. A company may not own the family, classroom, workplace, or clinic, but it may own the environment through which those relations are mediated. The collapse of distance becomes profitable because the platform inserts itself between separated persons.

There is also the danger of substituting simulation for material repair. A society might use telepresence to avoid addressing the physical causes of separation: poor transportation, inaccessible buildings, underfunded communities, unsafe public space, expensive housing, broken health-care systems, and fragmented families. Virtual connection can relieve suffering, but it can also normalize abandonment. The person who cannot reach the world is given a headset instead of a world made reachable.

The collapse of distance therefore carries both humanitarian and dystopian potential. It can connect the isolated, educate the remote, heal the separated, and reduce unnecessary travel. It can also extend work, deepen surveillance, privatize social space, and replace material justice with simulation. Telepresence is not good or bad by itself. It is a power that must be situated within institutions.

Codec Avatars intensify this power because they make telepresence emotionally persuasive. A cartoon avatar can be dismissed as partial. A photorealistic double can feel like arrival. The stronger the feeling of arrival, the more social life can be reorganized around mediated co-presence. The metaverse may not need people to believe they are in a fantasy world. It only needs them to accept that enough of another person is present to make the encounter count. Once that threshold is crossed, distance has not disappeared. It has been platformed.

6.4 The Digital Body as Commercial Infrastructure

The digital body is the hidden infrastructure of the metaverse. A synthetic world without bodies is a landscape. A platform with persistent avatars becomes a social economy. The avatar is where identity, presence, data, commerce, status, expression, labor, and governance converge. It is not a decorative feature added to virtual reality. It is the operational unit through which the user enters synthetic space as a recognizable participant.

In earlier internet culture, the profile performed this function. A profile organized identity through names, images, posts, preferences, connections, and histories. It allowed the platform to maintain continuity across sessions and social contexts. The avatar extends the profile into embodied form. It takes the account and gives it a body capable of occupying space, wearing goods, making gestures, joining events, performing labor, and becoming visible to others in real time. The profile was a social record. The avatar is a social instrument.

This instrument has commercial value because bodies are always sites of display. Clothing, hairstyle, posture, cosmetics, accessories, fitness, status symbols, and spatial behavior all communicate identity in physical life. The metaverse converts these signals into programmable markets. Avatar clothing, skins, jewelry, animations, expressions, environments, tools, vehicles, rooms, and effects can all become purchasable. The digital body becomes a retail surface. Self-presentation becomes a revenue stream.

The commercial infrastructure extends beyond fashion. In work settings, the avatar may become a professional interface. In education, it may become a student identity. In health care, it may become a patient proxy. In entertainment, it may become a performer. In customer service, it may become a representative. In politics, it may become a candidate's presence. In religion, it may become a worshipper or ministerial figure. In each domain, the digital body acquires practical consequences. It is not merely expressive. It mediates access and action.

Codec Avatars make this more consequential because the avatar becomes harder to separate from the person. A stylized avatar can be abandoned or replaced with relative ease. A photorealistic avatar derived from the user's face and voice becomes more personal, more continuous, and more sensitive. It may accumulate history, contacts, assets, credentials, reputation, and institutional recognition. Losing access to such an avatar could become more like losing a passport, wardrobe, workplace, and public face at once.

This is why platform control over digital bodies is politically important. The company that controls the avatar system can define what bodies are allowed, how they are verified, how they are modified, how they are monetized, how they are punished, and how they move across worlds. It can privilege certain aesthetics, identities, gestures, and forms of realism. It can impose safety filters, age restrictions, content rules, dress codes, and behavioral limits. It can

suspend or delete embodied access. The avatar may feel like the user's self, but the platform may treat it as an account feature.

Commercial infrastructure also requires standardization. For digital bodies to function across spaces, they need compatible formats, rigging systems, identity protocols, asset libraries, moderation tools, payment structures, and developer access. Standardization can increase usability, but it also centralizes power. If one company's avatar standard becomes dominant, then other institutions may adapt to it. Schools, employers, creators, and developers may build around the platform's body model. The company's design assumptions become social assumptions.

The digital body also creates new forms of inequality. High-quality avatars may require better hardware, better scans, better bandwidth, better lighting, and paid upgrades. Some users may appear with photorealistic fidelity while others appear as generic or low-resolution figures. Professional contexts may reward those with polished digital embodiment. Beauty, status, class, age, disability, race, gender presentation, and cultural identity may be recoded through platform defaults. The metaverse will not abolish social hierarchy. It may render hierarchy in new skins.

There is also the problem of labor. If work moves into avatar-mediated environments, the body becomes part of the labor interface. Employees may be expected to appear attentive, expressive, well-rendered, and socially present. Meetings may demand not just cognitive participation but avatar performance. Gesture, gaze, and posture may become managerial signals. The worker's digital body could be monitored for engagement just as the factory worker's physical body was once monitored for productivity. The office becomes synthetic, but discipline remains embodied.

Advertising will follow the body as well. In a metaverse environment, ads need not remain banners or videos. They can become objects, rooms, characters, clothing, events, atmospheric cues, product placements, or social experiences. The avatar may wear brands, interact with brands, enter branded worlds, or be targeted based on embodied behavior. The digital body becomes both consumer and advertising surface. Its movements generate data; its appearance sells meaning.

The Lawnmower Man gives this development a darker symbolic frame. Jobe's digital transformation is terrifying because his body becomes unstable, extensible, and network-bound. In the corporate metaverse, the digital body is stabilized for commerce. It is given identity, wardrobe, rules, assets, and market function. The horror is not bodily dissolution into pure cyberspace. The horror is bodily reconstruction as platform infrastructure.

The phrase "digital body" should therefore be taken literally. The metaverse requires bodies that can be stored, transmitted, modified, monetized, and governed. Codec Avatars are not merely

an improvement in realism. They are a step toward making the person's social body computationally native. Once that occurs, the body enters the logic of software platforms: updates, permissions, subscriptions, compatibility, moderation, analytics, and monetization.

This is the deepest significance of photorealistic avatars. They are not only about looking more real. They are about making mediated presence socially authoritative enough to support economic and institutional life. When the digital body becomes credible, it can carry work, love, trust, authority, reputation, and money. At that point, the metaverse no longer sells fantasy. It sells the infrastructure through which a person may be recognized as present. That is a far more ambitious business than virtual reality entertainment. It is the commercialization of embodied existence.

7. Orion AR Glasses and the End of the Separate Virtual World

7.1 From Headset Escape to Ambient Augmentation

Virtual reality begins with departure. The user puts on a headset, leaves ordinary visual access to the room, and enters a constructed environment. Even when the body remains physically seated or standing in a living room, office, laboratory, or gaming space, the perceptual act is one of exit. The screen is no longer in front of the user; it surrounds the user. The physical world recedes, and a synthetic world becomes primary. Augmented reality changes this direction. It does not ask the user to leave the world. It asks the user to accept a computational layer over the world already inhabited.

This shift from escape to augmentation is more radical than it first appears. Virtual reality can be treated as an episodic medium. One enters it, uses it, and exits it. It has thresholds. The headset marks a boundary. Augmented reality, especially in the form of glasses, aims to weaken the boundary between ordinary perception and computational mediation. The device is not a portal into elsewhere. It is a filter placed on here. The ambition is not to replace the room with a synthetic room, but to make the actual room responsive to data, identity, navigation, communication, memory, commerce, and platform intelligence.

Orion-style augmented reality therefore represents a deeper phase of the metaverse idea. The popular imagination often associates the metaverse with cartoon worlds, headsets, avatars, and virtual meeting rooms. But the more consequential version may be the one that does not look like entering a game at all. It looks like walking down a street while names, directions, translations, alerts, advertisements, social signals, object labels, messages, and AI-generated interpretations appear within the field of view. It looks like ordinary reality becoming searchable, annotated, ranked, and commercially responsive.

This is the end of the separate virtual world as the dominant metaphor. The old cyberpunk image imagined cyberspace as a distinct realm, a luminous elsewhere entered by console, headset, deck, or neural jack. Augmented reality dissolves that separation. The virtual is not beyond the physical; it is laminated onto it. The mainframe does not wait behind the screen; it comes forward into the user's eyes. The digital world stops being a destination and becomes an atmosphere.

The appeal is obvious. Ambient augmentation can make daily life easier. Directions can appear without looking down at a phone. Conversations across language can be translated in context. A broken machine can be overlaid with repair instructions. A surgeon can see relevant imaging. A student can identify plants, buildings, stars, artworks, or historical sites while looking at them. A worker can receive instructions hands-free. A person with memory impairment can receive reminders. A deaf or hard-of-hearing user can receive captions in live social space. Augmented reality can act as a prosthesis for attention, knowledge, memory, and orientation.

But the same qualities make it more invasive than virtual reality. VR competes with the world by offering another one. AR colonizes the world by interpreting it first. The user may still be walking through a real city, speaking to real people, handling real tools, and entering real rooms, but perception has become platform-assisted. The device mediates not an artificial environment but the physical environment itself. The stakes are therefore not only entertainment, gaming, or remote meetings. The stakes are daily perception.

This is where the comparison with The Lawnmower Man must be updated. The film imagines the terrifying possibility of a person entering the machine and becoming networked power. Augmented reality imagines the reciprocal movement: the machine enters the person's ordinary world and becomes perceptual companion, interpreter, and gatekeeper. In VR, the human crosses into computation. In AR, computation crosses into human perception. Both directions matter. Together, they describe the full metaverse ambition: the synthetic world becomes inhabitable, and the inhabited world becomes synthetic.

The transition from headset escape to ambient augmentation may also solve a practical adoption problem. Many people do not want to spend long periods sealed inside a headset. They may find it isolating, uncomfortable, socially awkward, or unnecessary. Glasses promise a lighter and more socially acceptable interface. They resemble ordinary eyewear rather than a helmet. They can be used while moving, working, talking, shopping, driving, exercising, learning, and navigating. The device becomes less like an event and more like clothing.

When an interface becomes clothing, it approaches permanence. The phone is already close to the body, but it still requires being held, checked, and pocketed. Glasses place computation at the threshold of sight. They are closer to perception than the hand. If the device becomes

comfortable, useful, fashionable, and socially normalized, it may be worn for hours. At that point, the metaverse no longer requires people to visit a virtual world. It waits on their faces.

7.2 Overlaying Computation onto the Physical World

To overlay computation onto the physical world is to change the meaning of environment. The world is no longer encountered as a field of objects, persons, paths, signs, and events alone. It becomes a field of objects, persons, paths, signs, events, and associated data. A building may carry its history, reviews, ownership, surveillance status, real-estate value, security instructions, or political controversy. A face may carry a name, contact history, social profile, professional role, risk score, or remembered conversation. A product may carry price comparisons, nutritional warnings, advertising offers, supply-chain claims, or user ratings. A street may carry navigation arrows, police alerts, traffic predictions, or commercial prompts. Computation turns the world into a readable surface.

This transformation is not entirely new. Smartphones already mediate the world through maps, cameras, search engines, social media, translation tools, barcode scanners, ride-sharing applications, dating platforms, review systems, and payment interfaces. The phone has taught users to consult digital layers before acting physically. People choose restaurants by ratings, navigate by map, identify songs by audio recognition, scan documents by camera, and experience public events through simultaneous recording and posting. Augmented reality intensifies this existing pattern by removing the need to look away from the world in order to consult the layer. The overlay appears where perception is already directed.

That difference matters. Looking down at a phone creates a visible interruption. The user leaves the immediate social field and consults a device. Glasses reduce the interruption. Information appears within the line of sight. The user can seem present while being computationally assisted. This makes the interface more fluid, but also more difficult for others to detect. In a conversation, one person may be receiving prompts, captions, identity cues, emotional analysis, suggested replies, or background information without the other person knowing. The social field becomes asymmetrical. One party sees only the person; the other sees the person plus the platform.

The overlay also changes authority. Human beings often treat labeled reality as interpreted reality. Once a device places a tag, arrow, score, warning, or recommendation over an object or person, that annotation can influence behavior before independent judgment occurs. An unlabeled person may become suspicious because the system marks them so. A restaurant may seem inferior because the overlay ranks it lower. A street may feel unsafe because the overlay highlights crime data. A face may become familiar because the device supplies a name. The platform’s description becomes part of the user’s perception.

This creates the possibility of perceptual advertising. Advertising on screens competes for attention within a bounded medium. Advertising in augmented reality can be spatial, contextual, and behavioral. It can appear near the object, route, person, venue, or action most relevant to the user. A coffee shop can glow at the moment of fatigue. A clothing brand can appear on a passerby's garment. A political message can attach to a monument. A product discount can appear at the shelf. A dating prompt can appear in a social venue. Advertising ceases to be adjacent to experience and becomes embedded in experience.

The same overlay can serve states, employers, schools, police, militaries, hospitals, retailers, and families. A warehouse worker may see optimized picking routes. A soldier may see target markers. A student may see instructions. A physician may see patient data. A tourist may see translations. A driver may see hazards. A shopper may see loyalty pricing. Each use can be defended as efficiency. But collectively they establish a world in which perception is increasingly preprocessed by institutional priorities. The question becomes not merely what the user sees, but whose logic is layered over sight.

Augmented reality also converts physical space into an addressable interface. Walls, tables, streets, hands, tools, signs, and products can become anchors for digital content. This makes the world programmable without physically rebuilding it. A bare wall can become a screen. A desk can become a control surface. A museum object can become animated. A classroom can become a simulation. A city can become a game board. A protest site can become a contested field of labels and counter-labels. Physical reality remains, but its practical meaning becomes editable.

This editability is seductive because the physical world is slow, expensive, and resistant. Buildings take time. Signs must be installed. Teachers must explain. Manuals must be printed. Roads must be marked. Augmented reality promises flexible meaning. It can change what a place is for different users at different times. The same street can be tourist map, delivery route, security zone, historical archive, shopping corridor, dating environment, or battlefield simulation. The environment becomes personalized.

Personalization, however, fragments shared reality. If each person sees a different overlay, the common world thins. Public space has always been interpreted differently by different people, but augmented reality can formalize and intensify those differences. Two users can stand in the same square while one sees heritage information, another sees police alerts, another sees advertisements, another sees protest logistics, another sees game objects, and another sees ideological labeling. The physical square remains common, but the experienced square diverges. A society that loses shared perception may also lose shared judgment.

This is the political depth of overlay. It is not merely a feature of glasses. It is a system for distributing interpretations. The power to overlay is the power to preframe reality. It can educate, assist, deceive, advertise, protect, manipulate, include, exclude, beautify, or degrade. In The Lawnmower Man, the virtual environment shapes Jobe by surrounding him. In augmented reality, the platform shapes the user by annotating ordinary life. The world remains visible, but it is no longer encountered alone.

7.3 The Interface Becomes Environment

The history of computing can be read as the gradual disappearance of the interface into environment. Early computers required specialized rooms, commands, and operators. Personal computers placed the interface on a desk. Laptops made it portable. Smartphones made it pocketed and continuous. Wearables placed it on the body. Augmented-reality glasses place it in the field of perception. At each stage, the interface becomes less like a separate machine and more like a condition of daily life. Orion-style devices represent the stage at which the interface attempts to become environmental.

When the interface becomes environment, the user no longer experiences computation as a discrete tool. It becomes part of orientation. The device may assist with memory, decision, communication, social recognition, navigation, translation, entertainment, purchasing, and work without requiring a formal session. The user does not “go online” in the old sense. The user inhabits an online-interpreted world. The boundary between use and non-use weakens because the device is always ready to mediate.

This is a central ambition of platform companies. A tool used occasionally creates episodic data and episodic dependence. An environment creates continuous relation. It can shape habits, expectations, workflows, social norms, and institutional practices. Once people rely on an augmented layer for directions, reminders, identification, translation, payment, authentication, and communication, removing the layer becomes costly. The interface becomes infrastructure by becoming difficult to abandon.

The environmental interface also changes how intelligence is distributed. Artificial intelligence can become a real-time companion within perception. Instead of asking a question to a separate device, the user may look at something and receive explanation. Instead of remembering a name, the system may supply it. Instead of reading a manual, the system may guide the hands. Instead of deciding what matters in a scene, the system may highlight priorities. Intelligence becomes situated. The platform does not only answer; it points, frames, and guides.

This creates a new dependency structure. The more useful the environmental interface becomes, the more human competence may be reorganized around it. Navigation skills,

memory habits, social recall, language learning, repair knowledge, and situational awareness may atrophy or transform. This is not automatically bad. Human beings have always delegated tasks to tools, writing, maps, calculators, calendars, and institutions. The danger arises when the delegation is opaque, privately governed, and commercially optimized. A person who depends on an environmental interface depends not only on computation, but on the values embedded in that computation.

The interface as environment also has consequences for children. A child raised with augmented perception may develop different expectations of objects, attention, memory, and social interaction. The world may appear incomplete without overlays. Waiting, wondering, forgetting, getting lost, asking strangers, misrecognizing, and exploring without guidance may become less common. The child may gain informational power but lose certain forms of unmediated discovery. The old distinction between learning the world and consulting the device may collapse.

Social etiquette will also change. Phones already altered public behavior by making divided attention normal. Glasses could make divided perception less visible. Is a person recording? Are they reading messages? Are they receiving prompts? Are they identifying others? Are they being guided through the conversation by an AI assistant? Are they seeing advertisements or private notes attached to the room? The uncertainty could create new forms of distrust. Ordinary eye contact may no longer guarantee shared attention.

The environmental interface also creates a memory problem. If everything can be annotated, recorded, summarized, and retrieved, forgetting becomes less natural. A conversation may leave traces. A place may retain digital attachments. A person may be associated with prior interactions. A mistake may follow an avatar or account. The world becomes sticky with data. Human social life depends partly on forgetting, ambiguity, and context decay. An augmented environment may preserve too much, or preserve selectively according to platform logic.

The Lawnmower Man imagined the interface as a spectacular portal. The user enters a visible machine-world. Augmented reality imagines a subtler and potentially more durable transformation: the interface becomes ordinary enough to disappear. This disappearance is not the absence of power. It is power's normalization. The most consequential interface is the one users stop noticing. When computational mediation feels natural, its decisions become background reality.

This is why Orion-style AR matters more than its immediate market success. Even if a particular device fails, the direction is clear across the industry: screens are moving toward faces, AI is moving toward real-time assistance, cameras are becoming interpretive sensors, and platforms are seeking control over the next interface layer. The future may not belong to one product, but

the ambition to make the interface environmental will persist. The metaverse may arrive not as a world people enter after dinner, but as a layer they wear to breakfast.

7.4 Mixed Reality as Soft Enclosure

Mixed reality is often described as a blending of physical and digital worlds, but the political term for such blending may be soft enclosure. Unlike a prison, wall, or locked room, soft enclosure does not necessarily prevent movement. It shapes the conditions under which movement becomes meaningful. The user remains physically free to walk, speak, shop, work, and gather, but those actions are increasingly mediated by a computational layer that defines choices, incentives, visibility, identity, and interpretation. The enclosure is soft because it appears as assistance.

This softness makes it powerful. A hard enclosure announces domination. A soft enclosure offers convenience. It routes, recommends, reminds, translates, highlights, scores, beautifies, and connects. The user adopts it voluntarily because it solves real problems. Over time, institutions begin to assume its use. Employers design workflows around it. Stores offer benefits through it. Schools assign tasks within it. Cities integrate services with it. Friends expect availability through it. Refusing the layer becomes less like rejecting a gadget and more like refusing the ordinary terms of participation.

This is how platform dependence grows. A person may first use augmented reality for navigation, then for messaging, then for work, then for payment, then for identity verification, then for social memory, then for entertainment, then for health prompts, then for access to buildings, events, or services. Each function is useful. Together, they create enclosure. The user can still remove the glasses, but removal now means losing practical capacities. The cage has no bars because the bars have become conveniences.

Mixed reality is especially suited to soft enclosure because it does not demand total replacement of the physical world. This makes it less frightening than full virtual reality. People may resist spending life inside a headset, but they may accept glasses that make ordinary life easier. The platform does not need to defeat physical reality. It only needs to become the preferred interpreter of physical reality. The enclosure succeeds when the world feels less usable without the layer.

The economic structure of soft enclosure depends on capture points. Identity is one capture point. If the glasses authenticate the user across services, the platform gains gatekeeping power. Payments are another. If purchases flow through the device, the platform can tax transactions. Attention is another. If overlays guide perception, the platform can influence what is noticed. Social interaction is another. If names, messages, avatars, and memories appear through the layer, the platform mediates relationships. Work is another. If tasks and instructions arrive

through the device, labor is reorganized around the platform. Each capture point can be defended as functionality. Together, they create dependency.

Mixed reality also encloses by ranking the world. Not all objects can be highlighted equally. Not all messages can appear. Not all routes can be recommended. Not all people can be labeled. Not all events can be surfaced. The platform must prioritize. These priorities may be shaped by relevance, safety, payment, advertising, social graph, institutional authority, or algorithmic prediction. The user experiences the result as a helpful simplification of complexity. But simplification is never neutral. To rank perception is to govern perception.

Soft enclosure does not require conspiracy. It arises from ordinary incentives. Platforms seek engagement, revenue, market share, developer lock-in, data advantage, and strategic control over interface layers. Users seek convenience, connection, status, productivity, and entertainment. Institutions seek efficiency, compliance, measurement, and access. These incentives align enough to build enclosure without anyone needing to declare it. The result can be dystopian precisely because it emerges through rational adoption.

The analogy to The Lawnmower Man is again instructive but must be inverted. The film's horror is spectacular: experimentation, amplification, madness, digital escape, network domination. Mixed reality's horror is banal: prompts, overlays, subscriptions, identity layers, ads, safety policies, ratings, recommendations, and behavioral nudges. Jobe tries to become ubiquitous inside the network. The mixed-reality platform tries to become ubiquitous inside perception. One is gothic transcendence. The other is administrative intimacy.

This administrative intimacy may be more durable than spectacle. People habituate quickly to tools that reduce friction. Once the augmented layer prevents getting lost, forgetting names, missing messages, misunderstanding signs, overpaying, or losing access, it becomes psychologically sticky. The world without augmentation may begin to feel primitive, risky, inefficient, or lonely. The user does not feel trapped. The user feels upgraded. That is the essence of soft enclosure.

The danger is not that all augmentation is bad. Many forms may be beneficial, humane, and liberating. The danger is that useful augmentation can become the carrier for private governance of perception. A society that adopts mixed reality must decide whether the perceptual layer will be open, accountable, interoperable, and limited, or whether it will be owned by a small number of platform companies whose incentives are only partially aligned with public life. The issue is not glasses alone. It is the sovereignty of the layer.

Mixed reality therefore represents the end of the separate virtual world and the beginning of something more subtle. The metaverse does not have to persuade humanity to abandon physical reality. It can win by making physical reality feel incomplete without platform

mediation. The old VR dream asked, “What if we could enter the computer?” The mixed-reality dream asks, “What if the computer could enter everything?” The second question is less theatrical, less obviously cyberpunk, and far more consequential.

In this sense, Orion-style AR is not an accessory to the metaverse. It may be the metaverse’s mature form. Virtual worlds dramatize the ambition. Augmented worlds normalize it. The headset shows the possibility of synthetic presence. The glasses make synthetic presence ambient. The separate world becomes a layer. The layer becomes habit. Habit becomes infrastructure. Infrastructure becomes power.

8. The Jobe Problem: Enhancement, Narcissism, and Platform Power

8.1 Digital Apotheosis as Silicon Valley Myth

The Jobe problem is the fantasy that technological enhancement does not merely improve the human being but elevates the human being into a superior order of existence. In The Lawnmower Man, this fantasy is literalized through Jobe’s transformation from a socially marginal man into an amplified intelligence seeking networked omnipresence. The film makes the fantasy grotesque, but the underlying myth is not confined to horror cinema. It recurs throughout modern technology culture: the belief that computation can overcome ordinary limits of body, memory, space, mortality, social status, and authority. The enhanced user becomes more than a user. He becomes a figure of digital ascent.

Silicon Valley often expresses this myth in secular language. It speaks of optimization, scale, disruption, intelligence augmentation, productivity, self-tracking, human-computer symbiosis, brain-computer interfaces, artificial intelligence, longevity, and post-scarcity futures. Yet beneath the secular vocabulary lies a recognizable structure of apotheosis. The human being is imagined as incomplete, inefficient, trapped in legacy biology, and awaiting liberation through technical systems. The old religious promise of transcendence is replaced by a technological promise of upgrade. Salvation becomes enhancement. Grace becomes interface. Heaven becomes network.

The metaverse belongs to this myth because it proposes not merely better communication but a new condition of presence. The avatar, headset, augmented overlay, and photorealistic double are not neutral tools. They imply that ordinary embodiment is insufficient. The body is too slow, too local, too mortal, too vulnerable, too constrained by geography, fatigue, appearance, age, disability, and social circumstance. The digital body promises relief from these limits. One can appear elsewhere, appear otherwise, appear enhanced, appear edited, appear scaled, and perhaps eventually appear after physical absence. This is the beginning of digital apotheosis in everyday form.

The Jobe problem emerges when enhancement becomes metaphysical. A tool that assists the human being remains subordinated to human purposes. A tool that redefines the human being begins to generate its own theology. Jobe's error is not simply that he becomes powerful. His error is that he interprets power as proof of higher being. He mistakes amplification for moral authority. He assumes that access to the system entitles him to domination through the system. The machine enlarges him without humanizing him. That is the warning.

Technology culture repeatedly risks the same mistake. Technical capacity is often treated as evidence of civilizational superiority, visionary status, or entitlement to govern. The founder who builds a platform used by billions may begin to seem, to himself and others, like more than an entrepreneur. He becomes an architect of behavior, a designer of social reality, a private legislator, a quasi-sovereign. The rhetoric of building the future can hide an older desire: to stand above ordinary institutions and remake the world according to a technical vision.

The metaverse intensifies this risk because it concerns the architecture of presence itself. A platform that hosts messages governs communication. A platform that hosts bodies governs embodied interaction. A platform that hosts synthetic environments governs social space. A platform that overlays reality governs perception. The builder of such systems is not merely designing a product. He is making claims about what human association should become. The Jobe problem is therefore not only psychological. It is institutional. The enhanced self becomes dangerous when it controls the environment in which others must appear.

Digital apotheosis also feeds on the confusion between imagination and consent. The visionary imagines a future, invests in it, markets it, builds prototypes, recruits developers, and frames the transition as inevitable. But humanity has not necessarily agreed to live inside that future. The act of imagining at scale can become coercive when backed by capital, infrastructure, and market dominance. The future is presented as a gift while being built as a dependency. This is how the private dream becomes public architecture.

The Lawnmower Man remains useful because it refuses to sanitize the apotheosis fantasy. Jobe's ascent is terrifying because it strips the fantasy of corporate politeness. He does not say he is improving communication, enabling creators, or building the next platform. He seeks power through networked existence. Contemporary technology rhetoric is far more disciplined, but the same question remains: what happens when a person or company believes that building the interface confers the right to redesign human life?

The Jobe problem is therefore the problem of enhancement without humility. It is the problem of intelligence without wisdom, scale without accountability, embodiment without ethics, and transcendence without community. It asks whether the dream of becoming more than human can remain humane when implemented through private platforms. The metaverse is one arena

in which this question becomes concrete. It offers digital bodies, synthetic worlds, and augmented perception. It also invites a dangerous conclusion: that whoever builds the most convincing artificial world has earned authority over the real one.

8.2 The Enhanced Self and the Entrepreneurial Body

The enhanced self is one of the central figures of contemporary technology culture. It is the person treated as a project of continuous optimization: more productive, more disciplined, more visible, more resilient, more data-aware, more networked, more adaptive, and more monetizable. The self is no longer simply lived. It is managed. It has metrics, routines, performance goals, public branding, wearable data, diet protocols, exercise regimes, productivity systems, and social-media surfaces. The body becomes entrepreneurial because it is expected to generate value, status, and signal.

This entrepreneurial body differs from older ideals of health or virtue. It is not merely the strong body, beautiful body, moral body, or disciplined body. It is the body as platform asset. It must perform competence, vitality, confidence, and future-orientation. It must signify that the person is investable. In elite technology culture, the founder's body becomes part of the company's mythology. Sleep habits, diet, exercise, combat sports, endurance routines, meditation, biohacking, and personal discipline become symbolic evidence that the leader is not merely managing a corporation but optimizing existence itself.

The metaverse extends this logic into digital embodiment. If the physical body is already treated as a project, the avatar becomes its synthetic extension. The user can curate appearance, gesture, wardrobe, expression, and presence. The digital body can be more polished, more controlled, more flexible, more adaptive to context. It can carry status goods, professional identity, fantasy elements, and social signals. It can be optimized for work, play, intimacy, performance, or influence. The entrepreneurial body gains a second surface.

This second surface is not merely expressive. It is economic. In platform environments, self-presentation becomes measurable and marketable. The avatar can attract attention, establish trust, display purchases, participate in branded spaces, perform labor, attend events, sell goods, and generate data. The digital body becomes a business interface. A person's presence can be packaged, ranked, searched, followed, invited, monetized, and excluded. This is social media's influencer logic extended into spatial embodiment.

The enhanced self also carries a moral pressure. If identity can be edited, failure to edit may appear as negligence. If appearance can be upgraded, ordinary appearance may seem insufficient. If presence can be optimized, awkwardness may become a correctable defect. If productivity can be augmented, fatigue may become a personal failure. If the avatar can always

appear composed, expressive, and available, the unenhanced human may seem increasingly unacceptable. The technology marketed as freedom may become expectation.

This is one of the dangers hidden in the language of empowerment. The user is told that virtual and augmented reality will allow self-expression without limits. But self-expression inside a platform often becomes competition for visibility, status, attractiveness, credibility, and access. The self must be designed for the environment's reward system. In social media, this meant optimizing posts, images, timing, reactions, and personal narrative. In the metaverse, it may mean optimizing body, movement, proximity, voice, spatial behavior, and emotional performance. The enhanced self is free to choose, but the choices are shaped by metrics.

The Lawnmower Man dramatizes this pressure through Jobe's transformation. He begins as someone judged deficient by ordinary social standards. Enhancement appears to release him from that judgment. Yet the release does not produce peace. It produces escalation. Improvement becomes domination because the enhanced self cannot tolerate remaining merely human. Jobe's new capacities create a new identity organized around superiority. The wounded self becomes the amplified self; the amplified self becomes the sovereign self.

Modern platform culture repeats this pattern in softer forms. Users who feel invisible may seek visibility through digital tools. Workers who feel replaceable may seek productivity augmentation. Leaders who feel historically significant may seek technological monuments. Consumers who feel ordinary may seek enhanced avatars. The metaverse offers many ways to feel expanded. But expansion can become dependence when the enhanced self requires constant platform mediation to remain enhanced.

The entrepreneurial body is also vulnerable to extraction because it accepts measurement as self-knowledge. Fitness trackers, productivity dashboards, engagement statistics, follower counts, biometric feedback, and social analytics all promise insight. But metrics do not merely reveal the self; they train the self to become metric-compatible. A person begins to act in ways that produce favorable numbers. The same will be true of avatar worlds. If platforms reward certain appearances, behaviors, gestures, or social patterns, users will adapt their digital bodies accordingly. The enhanced self becomes a creature of the measurement system.

This is not liberation from embodiment. It is a new embodiment under platform conditions. The body is no longer only biological, but neither is it free. It is reconstructed through sensors, profiles, avatars, ratings, moderation rules, and commercial incentives. The entrepreneurial body becomes both subject and object: the user acts through it, while the platform analyzes it. The body performs, and the system learns.

The metaverse therefore does not abolish the social pressures of physical life. It reorganizes them. Beauty, status, charisma, discipline, wealth, youth, authority, and belonging will not

disappear because bodies become digital. They will be recoded into new forms. Some users will gain possibilities unavailable offline. Others will encounter new hierarchies. The enhanced self promises escape from limits, but it may create a world in which everyone is expected to become upgradeable. That is the quieter version of the Jobe problem: not one man becoming a digital god, but millions of users being asked to treat themselves as unfinished products.

8.3 Martial Discipline, Tech Leadership, and Synthetic Masculinity

The public image of the technology founder has changed. Earlier versions emphasized the programmer, hacker, engineer, dropout, nerd, or garage inventor. The newer image often adds martial discipline, physical transformation, extreme fitness, combat sports, survival rhetoric, and controlled aggression. The leader is no longer merely cerebral. He is presented as embodied, hardened, trained, competitive, and capable of command. This shift matters because it reveals how technology culture compensates for the abstraction of digital power. The more immaterial the platform, the more important the leader's body can become as symbol.

Synthetic masculinity is the performance of disciplined force through mediated systems. It is not traditional physical masculinity in a simple sense, because its power does not primarily come from land, battlefield, factory, or manual labor. It comes from platforms, code, capital, networks, data centers, algorithms, devices, and artificial environments. Yet it borrows older signs of masculine authority: combat readiness, pain tolerance, bodily control, risk appetite, strategic aggression, and stoic self-mastery. The result is a hybrid figure: the warrior-engineer, the founder-athlete, the platform sovereign with a trained body.

This figure is relevant to the metaverse because virtual and augmented reality are technologies of embodiment. A founder associated only with screens, feeds, and advertisements may seem too disembodied to credibly lead the next era of presence. The martial body helps close that symbolic gap. It says that the builder of synthetic worlds has not abandoned physicality; he has mastered it. It reassures the public that digital leadership is not weak, passive, or merely bureaucratic. It frames technological command as an extension of personal discipline.

The comparison with Jobe is again useful. Jobe's transformation includes not only intelligence amplification but a change in posture toward power. He ceases to be submissive. He becomes commanding, punitive, erotically charged, and eventually godlike. His new digital identity is masculine in a synthetic and unstable way. It is not grounded in ordinary maturity or responsibility. It is produced through technological acceleration and wounded compensation. The enhanced man becomes dangerous because his new strength is not integrated with moral restraint.

Silicon Valley's martial turn should not be reduced to individual psychology. It belongs to a broader cultural moment in which elite men seek visible proof of vitality and legitimacy amid

suspicion that digital life has become soft, manipulative, sedentary, and socially corrosive. Combat sports, weight training, endurance competition, fasting, tactical aesthetics, and biohacking can function as rituals of purification. They allow the technology leader to appear as someone who has escaped the weakness his own platforms may have intensified in others. The founder becomes the disciplined exception to the attention economy.

This produces a strange asymmetry. Platforms may encourage billions of users into scrolling, comparison, sedentary consumption, algorithmic dependence, and emotional volatility, while their leaders publicly cultivate discipline, privacy, controlled exposure, and physical training. The user is captured by the interface. The leader trains outside it. The user's attention is monetized. The leader's body is optimized. This asymmetry gives synthetic masculinity its political edge. It is not merely personal branding. It marks the difference between those governed by platforms and those who govern them.

The metaverse could deepen this asymmetry by turning embodied performance into infrastructure. In a synthetic world, posture, movement, confidence, proximity, and appearance can be rendered, scored, modified, or enhanced. The disciplined body can be simulated, exaggerated, or purchased. Masculinity, femininity, beauty, authority, and charisma become avatar affordances. The body becomes programmable status. This does not remove hierarchy. It makes hierarchy more designable.

Martial symbolism also aligns with the competitive language of platform building. Companies "dominate" markets, "capture" users, "defend" moats, "attack" incumbents, "conquer" categories, and "own" the stack. The rhetoric is already militarized. When paired with public displays of physical discipline, technology leadership becomes theatrical sovereignty. The founder is not just a manager. He is a commander of future terrain. In the metaverse context, that terrain is synthetic space itself.

The danger of synthetic masculinity is that it can moralize power as fitness. If the leader appears disciplined, strong, and courageous, his technological ambitions may seem more legitimate. But bodily discipline does not answer questions of governance. A person can train intensely and still build systems that exploit attention, privatize social space, intensify surveillance, or distort public life. Physical self-mastery does not guarantee institutional humility. It may even reinforce the belief that those who master themselves have earned authority over those who have not.

This is another form of the Jobe problem. Enhancement becomes a sign of superiority. The enhanced self concludes that power is deserved because discipline has been demonstrated. In the film, Jobe's enhanced capacities lead him to see ordinary humans as beneath him. In platform culture, a softer version can emerge when leaders see users as populations to be

guided, nudged, optimized, corrected, or redesigned. The disciplined builder may become impatient with democratic friction.

The phrase “synthetic masculinity” does not mean that technology leadership is only male or that physical discipline is inherently suspect. The issue is symbolic. When control over digital infrastructure is paired with performances of bodily command, a new model of authority appears. It joins the body to the platform, aggression to interface design, personal optimization to civilizational ambition. It offers a leader who is both posthuman and primitive, coder and fighter, futurist and warlord, avatar and athlete.

The metaverse gives this figure a stage. In virtual worlds, bodies are not merely shown; they are designed. In augmented reality, perception is not merely used; it is mediated. The leader who claims to build these environments also claims influence over the future conditions of embodiment. That claim requires more than strength. It requires restraint, public accountability, and an ethic of limits. Without those, martial discipline becomes decoration on a deeper will to enclose.

8.4 When the User Becomes the Product and the God

The oldest criticism of social media is that the user is the product. The phrase means that platforms offering free or low-cost services often monetize the user’s attention, data, behavior, relationships, and predictive profile. The user appears to consume the service, but the platform sells access to the user’s attention and influenceable future actions. The metaverse complicates this formula. In immersive and augmented systems, the user may become both the product and the god: the object being monetized and the sovereign of a personalized world.

This dual role is seductive. The user enters a synthetic environment and appears to gain powers unavailable in ordinary life. The user can change appearance, teleport, summon objects, alter rooms, mute others, block unwanted persons, purchase enhancements, access impossible spaces, and perhaps eventually command AI agents or digital doubles. The world seems responsive. The user appears elevated. The interface flatters the self by making environment programmable around desire.

At the same time, the platform captures the conditions of that apparent sovereignty. Every movement, choice, purchase, interaction, expression, preference, and social relation can become part of the system’s economic substrate. The user feels godlike inside the world while remaining product-like to the platform that owns the world. This is the central paradox of consumer metaverse power. The user is sovereign downward, toward objects and experiences, but subordinate upward, toward infrastructure and governance.

The Lawnmower Man dramatizes the fantasy of becoming god inside the machine. Jobe’s ascent is terrifying because he seeks to overcome the distinction between user and system. He does

not merely want powers within virtual space. He wants identity with the network itself. The contemporary user receives a domesticated version of this fantasy. The platform grants local powers: customization, creation, expression, movement, purchase, and control over immediate surroundings. But the system-level powers remain elsewhere. The user may decorate the cell, but not own the prison. The user may appear as a god, but only within a privately administered cosmos.

This arrangement is commercially efficient because it converts narcissism into infrastructure. The more the user identifies with the avatar, the more valuable avatar goods become. The more the user feels present in a world, the more valuable virtual property becomes. The more the user customizes identity, the more data the platform receives. The more the user builds social life inside the system, the more costly exit becomes. The more godlike the user feels locally, the more dependent the user becomes globally.

The user-as-god fantasy also encourages world personalization. A platform can offer environments tuned to preference, history, mood, status, social graph, and spending capacity. The user may see a world increasingly arranged around individual desire. This seems empowering, but it can also shrink reality. A world that constantly adapts to the self may weaken the user's tolerance for resistance, difference, boredom, ambiguity, and other people's independent existence. The godlike user risks becoming infantile: powerful in simulation, fragile in reality.

Social media already trained users to inhabit personalized symbolic worlds. Feeds differ from person to person. Recommendations create individualized media climates. Search results, ads, friend suggestions, and political content can vary across users. The metaverse extends personalization from information space into spatial and embodied space. The user no longer merely receives a personalized stream. The user may enter a personalized room, city, classroom, workplace, store, or social environment. The world itself becomes feed-like.

When the world becomes feed-like, the user's sense of reality may become more manipulable. In a feed, the platform controls sequence. In a synthetic world, the platform can control spatial arrangement, sensory salience, avatar behavior, object placement, atmospheric cues, and simulated social presence. It can make some things feel near and others distant, some people visible and others absent, some products natural and others invisible, some ideas embodied and others abstract. The power to personalize space is more intimate than the power to personalize content.

The user-as-product logic also becomes more embodied. In social media, the platform monetizes attention to posts, videos, and ads. In immersive space, it can monetize attention plus motion, proximity, gesture, gaze, voice, facial response, hesitation, avoidance, and

interaction with objects. The user's body becomes part of the behavioral marketplace. The avatar may feel like a vehicle of freedom, but it is also a sensor-rich surface through which the platform learns the user.

At the same time, the godlike fantasy can be used to sell compliance. Users may accept surveillance if it improves realism. They may accept biometric capture if it makes avatars expressive. They may accept behavioral tracking if it personalizes environments. They may accept platform currencies if they enable identity goods. They may accept moderation and account dependence if it keeps worlds safe. Each compromise appears as the price of power. The user gives up sovereignty at the infrastructure level in exchange for sovereignty at the experiential level.

This is a classic structure of platform capitalism. The platform centralizes control while decentralizing expression. Users create content, relationships, identities, communities, and value, but the platform owns the conditions of creation. In the metaverse, this structure becomes spatial. Users may build worlds, but the platform owns the world-system. Users may design bodies, but the platform owns the body-standard. Users may create economies, but the platform owns the rails. Users may feel divine, but the platform remains the creator of the universe in which that divinity is permitted.

The Jobe problem therefore applies not only to founders but to users. Jobe is the fantasy of unlimited self-expansion through the machine. The metaverse democratizes small portions of that fantasy while keeping the larger architecture corporate. Millions of users can become miniature Jobes: enhanced, expressive, self-designed, locally powerful, and deeply dependent on the system that grants those powers. The horror becomes distributed. No single user needs to become a digital monster. A whole society can be trained to seek godlike self-expression inside owned environments.

The final danger is that the user who feels like a god may lose interest in the common world. Physical reality is resistant. Other people are independent. Institutions are slow. Bodies are fragile. Nature is indifferent. Politics is conflictual. The metaverse offers worlds in which friction can be reduced, edited, filtered, blocked, muted, or purchased away. This can be therapeutic in limited contexts. As a general orientation, it is dangerous. A civilization cannot survive if its most powerful citizens increasingly prefer customized synthetic sovereignty to shared material responsibility.

When the user becomes both product and god, critique becomes difficult. The user can truthfully say the system gives pleasure, agency, creativity, and connection. The critic can truthfully say the system extracts data, governs identity, privatizes space, and deepens dependency. Both are correct because the structure depends on both. The metaverse sells

godhood as user experience and monetizes humanity as substrate. That is the deepest form of the Jobe problem: the machine does not merely dominate the user. It teaches the user to enjoy domination as empowerment.

9. The Infinite Mainframe: Infrastructure, Sovereignty, and Control

9.1 Persistent Worlds as Private Jurisdictions

The infinite mainframe is the dream of a computational environment that does not merely host occasional activity, but becomes a persistent substrate for life. In The Lawnmower Man, the mainframe appears as a symbolic totality: the machine-network into which Jobe seeks to expand, command, and survive. In contemporary platform culture, the equivalent is not one computer but an ecosystem of devices, servers, identity systems, virtual spaces, augmented overlays, payment rails, artificial-intelligence services, developer tools, and behavioral databases. The infinite mainframe has become distributed. Its power lies not in one visible machine, but in the ability to make many environments depend on the same underlying platform logic.

Persistent virtual worlds differ from ordinary digital media because they continue to exist when the user leaves. A video is watched and ends. A message is sent and received. A game may be saved and resumed. But a persistent world aspires to remain socially, economically, and architecturally alive across time. Other users continue to gather. Objects remain placed. Assets retain value. Identities accumulate history. Events happen in absence. Reputation develops. Rules evolve. The world becomes something one returns to, not merely something one opens.

Persistence changes the meaning of ownership and governance. A temporary experience can be treated as entertainment. A persistent world becomes a place. Once people form relationships, build businesses, hold meetings, teach classes, display art, organize politics, worship, perform labor, exchange money, and attach memory to a synthetic environment, that environment acquires civic weight. It may be privately owned, but it begins to function like public space. This is the metaverse's central political contradiction: spaces built as products may come to operate as jurisdictions.

A jurisdiction is not only a territory recognized by law. It is any organized environment in which rules are made, enforced, contested, and lived under. A persistent platform world has entry requirements, identity rules, behavioral norms, moderation policies, property systems, transaction mechanisms, appeal procedures, sanctions, surveillance capacities, and technical boundaries. It decides who may enter, what they may do, what they may own, how they may appear, what counts as misconduct, and how disputes are resolved. These are governmental functions, even when performed by a company under the language of terms of service.

The private jurisdiction becomes more powerful as exit becomes costly. In a casual application, a user can leave without losing much. In a persistent world, exit may mean losing friends, customers, status, digital goods, workspaces, learning environments, professional identity, creative investments, and accumulated history. The more life is built inside the system, the more the system gains leverage. The platform does not need to imprison users. It only needs to make departure socially and economically expensive.

This is why virtual property is politically important even when it seems trivial. A digital jacket, room, tool, land parcel, avatar accessory, artwork, or event ticket may appear merely playful. But once people spend money, labor, status, and emotion on platform-native objects, the platform's control over those objects becomes control over value. The company can alter rules, fees, compatibility, visibility, scarcity, transferability, or access. It can devalue assets through redesign. It can suspend accounts. It can privilege partners. It can tax transactions. In a persistent world, design changes become acts of governance.

The same applies to speech. A synthetic world requires moderation not only of text but of voice, gesture, proximity, avatar appearance, spatial behavior, object placement, and simulated actions. The rules of expression become embodied. A user may be punished not only for what is said but for where an avatar stands, how close it approaches, what it wears, what it displays, what movement it performs, or what environment it creates. Moderation becomes spatial law. Platform policy becomes behavioral constitution.

This does not mean private platforms should have no rules. Synthetic worlds without governance can become abusive, chaotic, predatory, or unusable. The issue is accountability. In a public jurisdiction, rules are ideally subject to legal limits, democratic pressure, due process, transparency, and institutional checks. In private platform jurisdictions, users often receive contractual governance without meaningful citizenship. They are residents without votes, workers without ownership, creators without sovereignty, and speakers without constitutional standing inside the system that mediates them.

Persistent worlds therefore revive an old cyberpunk fear: corporate space replacing public space. Cyberpunk imagined cities, networks, and bodies governed by corporations whose technical power exceeded civic control. The metaverse translates that fear into user-interface design. The company does not need armed guards at the border of cyberspace. It has login credentials, device requirements, account histories, moderation systems, developer policies, intellectual-property claims, payment controls, and algorithmic visibility. The border is technical. The law is procedural. The sovereign is a platform.

The infinite mainframe becomes infinite not because it covers everything physically, but because it inserts itself into many domains of action. Work, school, play, shopping, medicine,

friendship, politics, art, and worship may remain distinct in content, yet depend on the same infrastructural layer. This is more powerful than a single virtual world. It is a federation of dependency organized around a central stack. The world may appear plural, but the jurisdictional logic is shared.

The Lawnmower Man dramatizes the danger through Jobe's desire to become ubiquitous in the network. The contemporary danger is more impersonal. No single Jobe is required. The platform itself becomes the distributed figure of networked authority. It watches, hosts, authenticates, ranks, sells, excludes, and remembers. It does not need to declare itself sovereign. Sovereignty appears as service continuity. The infinite mainframe is not a villain's machine. It is the ordinary background of mediated life once enough human activity becomes platform-native.

9.2 Identity, Payments, Labor, and Speech

A metaverse platform becomes sovereign when it controls four practical foundations of social life: identity, payments, labor, and speech. These are not optional features. They are the conditions under which a synthetic world becomes more than entertainment. Identity determines who appears. Payments determine how value moves. Labor determines what work is done and by whom. Speech determines how meaning, conflict, persuasion, and community are formed. A platform that organizes all four does not merely host experience. It governs a society-like environment.

Identity is the first layer because no persistent world can function without continuity of persons. Users must be recognized across sessions, spaces, purchases, relationships, and histories. The avatar may change clothing, style, or form, but the underlying account must remain stable enough to support trust, property, reputation, moderation, and access. This gives the platform enormous authority. It can verify, name, rename, authenticate, rank, suspend, restore, or erase the practical personhood through which the user appears in synthetic space.

Identity control becomes especially serious when avatars approach photorealistic or professional use. In a cartoon game, losing an account may be frustrating. In a metaverse used for work, education, health care, political organizing, or commerce, losing account access can become a form of civic and economic exclusion. The platform identity becomes a passport. It may carry credentials, social graph, work history, digital assets, communication channels, biometric likeness, and institutional permissions. A privately governed identity layer can therefore become more consequential than many state-issued documents in daily practice.

Payments form the second layer. Synthetic worlds require ways to buy, sell, subscribe, tip, rent, commission, license, and transfer. Once payments are integrated into the world, the platform becomes more than a communication medium. It becomes a financial intermediary. It can set fees, approve merchants, police fraud, freeze accounts, privilege currencies, promote products,

restrict categories, and extract revenue from transactions it did not originate. Economic life inside the world becomes platform-taxed life.

Digital goods deepen this control because they blur consumption, identity, and property. Avatar clothing, virtual spaces, tools, art, access passes, branded objects, and professional assets may all become part of a user's economic presence. The user's body and environment become purchasable surfaces. This makes payments inseparable from identity. What one buys affects how one appears, where one may go, what one may do, and how one is perceived. Commerce becomes embodied.

Labor is the third layer. The metaverse is often marketed through play and connection, but its economic justification depends heavily on work: remote collaboration, training, design, simulation, customer service, education, meetings, productivity, and enterprise integration. If labor enters synthetic space, then the platform mediates the workplace. It may determine how employees appear, how meetings occur, how attention is measured, how tasks are assigned, how training is evaluated, and how presence is recorded. The office becomes computational territory.

This raises older labor questions in new form. Who owns the tools? Who owns the workspace? Who records interactions? Can an employer require avatar presence? Can workers refuse biometric capture? Can gesture, gaze, or posture be used as productivity signals? Can virtual meetings be analyzed for engagement? Can customer-service avatars be scripted, monitored, or replaced by AI doubles? Can labor performed in virtual environments be devalued because the setting appears playful? The metaverse does not abolish exploitation. It gives exploitation new interfaces.

Speech is the fourth layer. In synthetic worlds, speech includes more than words. It includes voice, text, avatar gesture, object creation, spatial arrangement, symbolic clothing, environmental design, recorded media, and social proximity. A protest can be a gathering of avatars. A threat can be a movement. A slur can be spoken in voice. Harassment can be spatial pursuit. A political sign can be a virtual object. A religious ritual can be an environment. A satire can be an avatar performance. Speech becomes embodied and architectural.

This makes moderation both necessary and dangerous. Without moderation, synthetic spaces can become hostile or unusable. With moderation, the platform gains authority over expression at an intimate level. It can mute, move, hide, blur, demote, suspend, ban, or algorithmically isolate persons and objects. It can define protected categories, forbidden gestures, acceptable satire, sexual boundaries, political expression, commercial solicitation, and interpersonal conduct. It may do so inconsistently, secretly, or under pressure from governments, advertisers, employers, activists, or public-relations crises.

When identity, payments, labor, and speech converge, platform governance becomes comprehensive. A user may depend on the same account to appear, speak, earn, buy, teach, learn, attend, organize, and socialize. This convergence is the substance of the infinite mainframe. It is not one database, but one jurisdictional dependency across multiple domains of life. The user may experience this as convenience. The platform experiences it as leverage.

The danger is not only censorship or surveillance in narrow terms. It is the privatization of basic social functions. Public life depends on the ability to appear as a person, exchange value, work, and speak under rules that can be contested. If those functions migrate into corporate synthetic worlds, political theory must follow them. A metaverse account may become a citizen-like identity without citizenship rights. A digital wallet may become a bank-like tool without public banking obligations. A virtual workplace may become an office-like environment without established labor protections. A speech platform may become a town-square-like space without constitutional guarantees.

The Lawnmower Man gives this convergence a mythic image in the mainframe. Jobe wants to enter the network because the network contains power over communication, infrastructure, and presence. Contemporary platforms do not need one dramatic moment of entry. They accumulate power by integrating identity, payments, labor, and speech into seamless experience. The mainframe expands by becoming useful. Its sovereignty appears first as convenience, then as dependency, then as necessity.

9.3 Platform Sovereignty and the Architecture of Dependence

Platform sovereignty is the capacity of a private technical system to make rules that shape practical life across populations. It is not identical to state sovereignty, because the platform usually lacks formal territorial authority, taxation power in the state sense, courts, armies, or constitutional legitimacy. Yet it can still exercise quasi-sovereign functions: identity management, access control, rule enforcement, economic extraction, dispute resolution, behavioral surveillance, public communication, and infrastructure governance. The metaverse increases the importance of platform sovereignty because it extends these functions into embodied and spatial domains.

The architecture of dependence begins with convenience. Users adopt a platform because it solves problems. It connects friends, hosts meetings, stores memories, enables work, distributes media, processes payments, or creates entertainment. Each function may be genuinely useful. Dependence develops when many useful functions are bundled into one identity, device, ecosystem, or environment. The user does not feel coerced. The user feels served. This is the elegance of platform power: dependence grows through satisfaction.

A metaverse platform can intensify dependence because it aims to unify hardware, software, identity, social graph, avatar, marketplace, workplace, and sensory interface. A user may buy the device, create the avatar, meet friends, attend work, purchase goods, store assets, use productivity tools, join events, and access augmented overlays through one ecosystem. The more integrated the ecosystem becomes, the more costly it is to leave. Exit may require not only abandoning an application, but replacing a social body, professional space, asset library, payment history, and perceptual habit.

Dependence also grows through network effects. A synthetic world becomes more valuable when others are there. Friends, colleagues, teachers, clients, creators, brands, institutions, and audiences pull one another into the same spaces. Even users skeptical of the platform may join because their social or professional world has moved there. This is not ideological persuasion. It is coordination pressure. The platform wins when participation becomes the price of access to other people.

Developer ecosystems add another layer. Creators and institutions invest labor into building worlds, tools, objects, training systems, educational environments, entertainment venues, and commercial spaces. Once invested, they become dependent on the platform's rules, discovery systems, revenue shares, technical updates, and moderation policies. Their dependency then reinforces user dependency because users come for the experiences developers build. The platform becomes the landlord of imagination.

Employers can accelerate dependence by adopting synthetic work environments. If meetings, training, design reviews, onboarding, performance evaluations, or customer interaction occur in metaverse spaces, workers may have little practical choice. A technology initially marketed as optional entertainment becomes required infrastructure. This pattern has already occurred with email, smartphones, productivity software, video conferencing, and messaging platforms. Once work adopts a medium, refusal becomes professionally costly. The metaverse may follow the same path if enterprise use becomes compelling enough.

Platform sovereignty is strengthened by opacity. Users may not understand how moderation decisions are made, how recommendations operate, how data are collected, how prices are set, how avatars are ranked, how visibility is allocated, or how disputes are resolved. Technical complexity becomes political cover. The system appears too intricate for ordinary contestation. The user faces decisions without lawmakers, judges, or public hearings. Appeal mechanisms may exist, but they remain internal to the sovereign architecture.

The architecture of dependence also includes emotional attachment. People attach meaning to places, objects, bodies, and relationships. If a user's avatar becomes familiar, if a virtual room holds memories, if friends gather in a particular world, if purchased objects carry status, if a

child's birthday or a memorial event occurs in synthetic space, then the platform gains emotional depth. It is no longer merely a service. It holds part of life. Emotional dependency is harder to regulate because it cannot be measured only in money or time.

The metaverse may also produce dependence through competence. Users may learn to perform tasks with augmented assistance, spatial collaboration, AI prompts, visual overlays, and avatar-mediated communication. Over time, the unaided version of the task may feel difficult or inefficient. This is common to tools generally, but platform tools differ because their competence is often rented rather than owned. A person dependent on a hammer still owns the hammer. A person dependent on an augmented-reality workflow may depend on subscriptions, servers, updates, accounts, and policies. Competence becomes conditional.

Sovereignty appears when the platform can change conditions unilaterally. It may alter interface defaults, pricing, avatar standards, moderation rules, developer access, data practices, identity requirements, advertising formats, hardware compatibility, or currency systems. Users and developers may complain, but their practical alternatives may be limited. The platform governs through updates. Law arrives as software versioning.

This is why the architecture of dependence must be analyzed before the metaverse becomes fully normalized. Once dependency is established, reform becomes harder. People will defend the platform because they rely on it. Institutions will hesitate to leave because they have invested in it. Regulators will struggle because the technology is complex and transnational. Competitors will struggle because network effects protect incumbents. Users will struggle because their social bodies, assets, and histories are embedded. The time to contest sovereignty is before it becomes common sense.

The Lawnmower Man imagines dependence through the dramatic fusion of human and machine. Contemporary dependence is less theatrical. It is built through accounts, devices, identity layers, payments, meetings, memories, and habits. The user does not merge with the mainframe in one cinematic climax. The user becomes dependent through thousands of convenient acts. This is the modern infinite mainframe: not a single act of capture, but an architecture in which exit slowly becomes unreasonable.

9.4 The Metaverse as Soft State

The metaverse becomes a soft state when it performs state-like functions without openly becoming a state. It governs identity, space, property, speech, association, movement, labor, security, and dispute resolution inside environments that may be privately owned and globally distributed. It does not need borders in the traditional sense. Its borders are accounts, devices, compatibility standards, app stores, payment systems, content rules, and network access. It

does not need flags. Its symbols are logos, avatars, interface conventions, and branded environments. It does not need citizenship. It has users.

The phrase soft state captures the ambiguity of this power. The metaverse does not replace government in a formal constitutional sense. States still make laws, collect taxes, maintain police, regulate corporations, issue passports, and control physical territory. Yet the metaverse can create zones where daily conduct is more immediately shaped by platform rules than by public law. A user's experience of freedom or exclusion may depend less on constitutional principles than on account status, moderation categories, payment permissions, and device access. Public sovereignty remains in the background; platform sovereignty operates at the interface.

A soft state governs through design rather than legislation. It can make some actions easy and others difficult. It can create default distances between avatars, limit certain gestures, blur certain images, block certain words, highlight approved spaces, recommend some events, hide others, require identity verification, restrict recording, enforce age gates, and determine how objects may be exchanged. These are rules, but they may not look like rules. They appear as affordances. The law is embedded in the environment.

This environmental governance may be more effective than explicit command. People adapt to what the interface permits. If a platform makes certain forms of assembly difficult, fewer assemblies occur. If it makes certain purchases easy, more purchases occur. If it makes certain identities visible and others marginal, social hierarchy follows. If it makes certain speech risky, users self-censor. If it makes certain behaviors rewarding, users repeat them. The soft state does not always need punishment. It governs by shaping possibility.

The soft state also has diplomatic relationships with actual states. Governments may pressure metaverse platforms to remove content, identify users, restrict transactions, preserve evidence, police extremism, comply with sanctions, protect children, prevent fraud, or enforce national laws. Platforms may resist, comply, negotiate, or overcorrect. Users inside the metaverse may then experience a hybrid sovereignty: corporate rules shaped by government pressure but implemented through opaque technical systems. The public may not know where state authority ends and platform discretion begins.

This hybridity is especially important for global platforms. A synthetic world may host users from many countries under different speech laws, privacy rules, political conflicts, religious norms, labor standards, and cultural expectations. The platform must either localize governance, impose universal standards, or create complex hybrid rules. Each choice has political consequences. Universal standards may override local culture. Localized standards may enable

repression. Hybrid standards may become inconsistent and opaque. The soft state is global but not democratic at global scale.

The metaverse as soft state also raises questions about violence and safety. Virtual spaces can produce real harm even when no physical contact occurs. Harassment, stalking, sexualized misconduct, intimidation, fraud, impersonation, extremist recruitment, psychological manipulation, and workplace abuse can all occur through avatars and synthetic environments. The platform must protect users, but protection requires surveillance, reporting systems, evidence capture, behavioral rules, and sanctions. Safety becomes the justification for governance. Governance becomes the means of control. The problem is not that safety is false. The problem is that safety infrastructure can become general authority over social life.

Children make the soft-state problem sharper. A metaverse platform used by minors must govern age, identity, contact, content, commerce, education, advertising, and psychological safety. It may become a quasi-school, playground, mall, theater, and surveillance environment at once. Parents, states, schools, and companies will compete over authority. The child's developmental world may be partly administered by platform policy. This is too important to be left to product design alone.

The soft state also controls memory. In synthetic environments, events can be logged, replayed, moderated, deleted, or algorithmically summarized. The platform may decide what counts as evidence, what is retained, what is forgotten, and who may access records. Memory is a governmental function because it shapes accountability. A world without records enables abuse; a world with total records enables surveillance. The soft state must choose where memory exists, but its choices may serve liability and profit more than justice.

The Lawnmower Man gives the soft state its mythic shadow. Jobe seeks to become a sovereign intelligence inside the network. The metaverse distributes this sovereignty into institutions, policies, accounts, sensors, and interfaces. There may be no single digital god. Instead, there is a governing apparatus that appears as convenience, safety, immersion, and connection. The horror becomes procedural. The mainframe does not announce domination. It asks users to accept updated terms.

The metaverse as soft state is not inevitable in one fixed form. Alternatives are possible: interoperable standards, public-interest governance, data minimization, user-owned identity, portable avatars, transparent moderation, labor protections, open protocols, democratic oversight, privacy rights for biometric expression, and legal limits on perceptual advertising. But such alternatives require recognizing the political nature of synthetic worlds before they become too embedded to contest. A world can be virtual and still require constitutional thinking.

The central argument of this section is therefore simple: the metaverse is not merely a medium. If successful, it becomes an institutional environment. It hosts identity, value, labor, speech, memory, and association. Those functions are too fundamental to be governed as ordinary consumer features. The infinite mainframe is the platform that becomes world-like. The soft state is the world-like platform that governs without admitting it has become political. In that convergence lies the deepest danger of the metaverse project: the transformation of human presence into privately administered territory.

10. Classic Sci-Fi Roadmaps for Technology Companies

10.1 The Holodeck Dream

The holodeck is the most optimistic version of the metaverse. It imagines synthetic reality not as escape, addiction, surveillance, or corporate enclosure, but as a humane expansion of experience. A room becomes any room. A ship becomes a city, forest, courtroom, classroom, battlefield, theater, memory palace, or impossible world. The user does not wear the fantasy on the face; the environment itself becomes responsive. In this vision, computation disappears into space so completely that the user experiences the simulation as immediate world. The holodeck is not merely a display. It is an obedient universe.

This dream has shaped technology culture because it combines immersion with dignity. Unlike cyberpunk cyberspace, the holodeck does not require degrading the body, abandoning the physical world, or becoming a disembodied hacker. The user remains embodied, social, and active. One walks, speaks, touches, learns, rehearses, plays, remembers, and imagines. The interface is not a screen or headset but an environment capable of becoming whatever human purpose requires. The holodeck therefore represents the ideal form of spatial computing: total simulation without visible machinery.

Its appeal is moral as well as technical. A holodeck can educate without danger, train without casualties, travel without distance, heal without exposure, perform without limits, and entertain without material constraint. It can let people visit lost worlds, practice difficult conversations, explore history, simulate futures, reconstruct memories, and inhabit art. It is the dream of abundance through programmable space. Scarcity of location, scenery, props, teachers, actors, and risk can be overcome by computation. The world becomes editable for humane ends.

Yet the holodeck dream also hides a problem. If simulation becomes sufficiently convincing, the boundary between experience and substitution weakens. A person may rehearse life so completely that rehearsal competes with life. Synthetic friends, synthetic lovers, synthetic victories, synthetic adventures, and synthetic reconciliations may become emotionally sufficient. The holodeck is safe because it can end. But the better it becomes, the more

attractive it is to remain. The danger is not that the simulation is false. The danger is that it may be more accommodating than reality.

The metaverse repeatedly borrows from the holodeck dream when it promises workrooms, classrooms, concerts, training centers, therapeutic spaces, and shared fantasy worlds. The rhetoric is often practical: better meetings, better training, better design, better collaboration. Beneath that practicality lies the holodeck's deeper promise: the environment should obey intention. A team should be able to summon a prototype, enlarge a molecule, enter an architectural model, gather across distance, or transform an empty room into a stage. Space becomes software.

This dream differs from The Lawnmower Man in tone but not in metaphysical ambition. The Lawnmower Man presents virtual reality as dangerous transcendence. The holodeck presents it as civilized mastery. Both imagine a world in which physical limits yield to computation. Both treat environment as programmable. Both imply that the human being can be intensified by entering artificial space. The difference is governance. In the holodeck ideal, the user or community controls the simulation. In the platform metaverse, the simulation is mediated by corporate infrastructure.

This distinction is decisive. A holodeck owned by the user, ship, school, hospital, or public institution could be a tool of autonomy. A holodeck owned by an advertising platform becomes a mechanism of capture. The same technical capacity can serve education or addiction, therapy or manipulation, art or behavioral extraction. The question is not whether synthetic environments can enrich life. They can. The question is who controls the conditions under which enrichment occurs.

The holodeck dream also helps explain why the metaverse remains attractive despite repeated failures. The public may mock crude avatars and empty corporate worlds, but the underlying dream is still compelling. A world-machine that can become any world is one of the most powerful fantasies in technological modernity. It promises the abundance of imagination without the limits of matter. Even skeptics can understand the appeal. The failure of a particular platform does not kill the holodeck dream because the dream answers a real desire: to make experience more flexible than physical reality permits.

However, the holodeck also teaches that simulation requires ethics. A programmable world must decide what cannot be programmed, what should not be simulated, what forms of violence or intimacy are permissible, how memory is protected, how consent operates, and how users return to ordinary life. The ideal holodeck is not only technically sophisticated. It is governed by norms strong enough to prevent simulation from becoming predation. This is

where corporate metaverse projects often appear underdeveloped. They invest in presence before settling the moral architecture of presence.

The holodeck dream is therefore both inspiration and warning. It shows the beautiful version of synthetic reality: learning, play, creativity, healing, and co-presence inside responsive space. It also shows why the metaverse cannot be evaluated only by graphics, headset comfort, or market adoption. The real question is whether programmable environments will enlarge human agency or replace reality with privately managed compliance. The holodeck is the noble ancestor of the metaverse. But nobility depends on who owns the room.

10.2 Snow Crash and the Naming of the Metaverse

Snow Crash gave the metaverse its most durable name and one of its sharpest early social images. Its metaverse is not merely a virtual playground. It is a street, a marketplace, a status hierarchy, a commercial zone, a symbolic city, and an extension of a fractured political economy. Users appear as avatars, but not all avatars are equal. Wealth, design, bandwidth, access, and technical sophistication shape how one appears and what one can do. The metaverse is not a utopia outside society. It is society translated into synthetic form.

This is why Snow Crash is so important for analyzing technology companies. The title "metaverse" carries glamour, but the fictional world from which the term became famous is not simply liberatory. It is stratified, commercialized, privatized, and deeply entangled with power. The metaverse is a place where identity can be stylized, but also where inequality becomes visible. A person's avatar expresses not only imagination but resources. The synthetic world reproduces material hierarchy rather than abolishing it. This is one of the most important lessons corporate metaverse rhetoric often suppresses.

The novel's metaverse is also urban. It has streets, destinations, entrances, architecture, clubs, neighborhoods, and social codes. This matters because spatial metaphors change how digital life is imagined. The early web was often described through pages, sites, links, and surfing. Social media used feeds, profiles, timelines, walls, and networks. The metaverse returns digital life to city imagery: places to go, bodies to display, territories to own, venues to enter, crowds to join, and districts to avoid. This spatialization makes power visible in new ways. A platform is no longer only a stream of content. It becomes a built environment.

Technology companies have often embraced the name while softening the critique. The word "metaverse" suggests a grand successor to the internet, a next-order reality in which virtual worlds become persistent and interconnected. It is excellent branding because it feels bigger than any single product. It implies inevitability, scale, and civilizational transition. But the original literary force of the term is inseparable from a world of corporate fragmentation,

private power, social inequality, and cultural dislocation. To use the name without the warning is to extract the aesthetic while ignoring the diagnosis.

Snow Crash also clarifies the avatar as status object. In a flat chat system, users may be distinguished by names and text. In a visual metaverse, distinction becomes bodily and spatial. The avatar can display wealth, subculture, competence, beauty, menace, humor, professionalism, or fantasy. This enables expression, but also competition. The body becomes social currency. People will not enter virtual worlds as abstract equals. They will bring class, taste, hardware, bandwidth, skill, race, gender, age, disability, and institutional power with them. The metaverse may promise escape from the body, but it will generate new bodies through which hierarchy appears.

The novel also anticipates the fusion of commerce and identity. A metaverse street lined with brands, experiences, and social venues is not fundamentally different from the corporate dream of virtual real estate, branded worlds, digital goods, creator marketplaces, and avatar fashion. The more people value their synthetic presence, the more commerce can attach to it. The metaverse is not an escape from consumer culture. It may become consumer culture's most intimate theater, because the self's visible form is itself purchasable.

Snow Crash is also valuable because it refuses to isolate virtual reality from physical disorder. Its metaverse is compelling partly because the surrounding social world is unstable, privatized, and fragmented. Synthetic order becomes attractive when material order decays. This is deeply relevant to contemporary metaverse ambitions. If cities are unaffordable, public spaces degraded, work alienating, travel expensive, communities fragmented, and politics hostile, synthetic worlds may appear as substitutes for repaired institutions. The metaverse can become a consolation prize for civilizational failure.

This is one of the darkest interpretations of the corporate metaverse: it may not represent the next stage of flourishing, but a managerial adaptation to social breakdown. Instead of rebuilding common life, companies offer private worlds. Instead of restoring public trust, they sell curated presence. Instead of improving transportation, they offer virtual meetings. Instead of creating accessible cities, they offer simulated access. Instead of repairing loneliness, they offer avatars. The synthetic world becomes attractive because the material world has been allowed to become intolerable.

Meta's adoption of the metaverse idea therefore inherits a contradiction from the name itself. The term suggests a grand universal space, but the likely implementation is fragmented among corporations, devices, standards, jurisdictions, and economic models. The prefix "meta" implies a layer above ordinary worlds, but the actual platform may reproduce the same conflicts that afflict ordinary life: inequality, exploitation, surveillance, exclusion, fraud, harassment,

monopoly, and privatized governance. The metaverse is not above society. It is society with a new interface.

The relation to The Lawnmower Man is instructive. The Lawnmower Man imagines digital transformation through a single human subject who becomes amplified by VR and network power. Snow Crash imagines a broader social architecture in which many subjects occupy a commercialized virtual world. One is mythic and psychological; the other is infrastructural and urban. Together they provide a fuller genealogy for Meta's project. The metaverse is both Jobe's dream of digital enhancement and the Street's world of avatar status, commerce, and private power.

The naming of the metaverse therefore should not be treated as accidental branding. Names carry memory. When a company adopts a term from dystopian or satirical fiction, it imports a warning whether it admits it or not. The word "metaverse" is not clean. It carries the history of a fictional world in which virtual identity, corporate power, inequality, and cultural fragmentation are inseparable. A responsible metaverse project would begin by acknowledging that inheritance. A reckless one treats the warning as a roadmap.

10.3 Neuromancer and Disembodied Cyberspace

Neuromancer gave modern culture one of its defining images of cyberspace: a consensual hallucination experienced by those who enter the computational matrix. Its vision is colder, darker, and more disembodied than the holodeck or many later metaverse fantasies. Cyberspace is not primarily a social playground. It is a field of data, power, crime, artificial intelligence, corporate secrecy, and ecstatic abstraction. The body remains behind while consciousness moves through a luminous architecture of information. This is the dream of escape from flesh into pattern.

This disembodied cyberspace shaped technology culture because it turned computation into territory. Data was no longer merely stored or processed. It became spatially imaginable. Systems could be entered, navigated, attacked, defended, mapped, and possessed. The hacker became a kind of pilot, thief, mystic, and warrior in an invisible world. Access to cyberspace meant access to the hidden order beneath ordinary society. Power belonged to those who could move through the matrix.

The metaverse inherits this spatialization but changes its bodily assumptions. Neuromancer's cyberspace is largely disembodied; Meta's metaverse is explicitly re-embodied. It wants avatars, faces, gestures, rooms, meetings, and social presence. Yet the older cyberpunk logic remains beneath the surface. Synthetic space still functions as the visible form of hidden computational systems. The avatar world is only the user-facing layer. Beneath it lie databases, networks, identity systems, recommendation engines, moderation systems, payment rails, artificial

intelligence, advertising models, and corporate strategy. The metaverse gives cyberspace a body without eliminating cyberspace's deeper machinery.

Neuromancer also provides a useful contrast to Meta's rhetoric of connection. In classic cyberpunk, cyberspace is thrilling but dangerous. It is not a family-friendly social environment. It is an arena of intrusion, addiction, artificial intelligence, black markets, corporate espionage, and altered consciousness. The user who enters it may gain power, but also becomes vulnerable to systems beyond ordinary comprehension. This sense of danger is largely absent from corporate metaverse presentations, which emphasize creativity, collaboration, and presence. The danger has not disappeared. It has been moved behind the interface.

Disembodiment remains relevant even in avatar-based systems because the body represented in the metaverse is not the same as the body sitting in the room. The physical body may be still, tired, surveilled, uncomfortable, or isolated, while the avatar moves through a synthetic world. The user may feel present elsewhere while remaining physically dependent on hardware, electricity, servers, and platform access. The body is both escaped and intensified. Its motions are abstracted into signals; its face is modeled; its gestures are tracked; its perception is enclosed. The metaverse does not abolish the flesh. It turns the flesh into input.

This is one of the central transformations from Neuromancer to Meta. Classic cyberspace imagined the body as something to be left behind. The contemporary metaverse imagines the body as something to be captured, reconstructed, and made useful inside computation. The user does not float as pure consciousness through abstract data. The user appears as a designed body inside a governed world. This may seem more humane because it preserves embodiment. But it may also be more extractive because the body becomes a richer data source.

Neuromancer also warns that artificial intelligence and cyberspace cannot be separated. Any mature metaverse will likely depend heavily on AI: world generation, avatar animation, translation, moderation, object recognition, search, tutoring, personal assistance, behavioral prediction, content creation, emotional modeling, and synthetic agents. Users will not only meet other humans. They will meet simulations, bots, assistants, replicas, and hybrid presences. The boundary between person and system will become uncertain. A world filled with realistic avatars will also be a world vulnerable to artificial persons.

This uncertainty is deeply cyberpunk. In a disembodied data world, identity is unstable. One may not know who controls an image, voice, agent, or message. In a photorealistic metaverse, the problem becomes more intimate. A face may not guarantee a person. A voice may not guarantee agency. A gesture may be generated. A meeting participant may be partially automated. A deceased person may be simulated. A celebrity may be licensed. A worker may be

represented by a digital double. The avatar reintroduces body as evidence at the very moment AI undermines evidence.

The relation between cyberspace and corporate power is also central. Neuromancer's world is not governed by democratic institutions in any ordinary sense. Corporations, artificial intelligences, criminal networks, and specialized operators shape reality. This is not merely aesthetic. It is a theory of power in a networked society. As technical systems become too complex and too essential for ordinary civic control, those who own or penetrate them gain disproportionate authority. The metaverse risks reproducing this condition. Its interface may be friendly, but its dependence on proprietary infrastructure can concentrate power in ways cyberpunk already imagined.

Neuromancer's disembodied cyberspace therefore remains a necessary counterpoint to the metaverse's embodied marketing. It reminds us that beneath every synthetic room is an abstract system. Beneath every avatar is data. Beneath every feeling of presence is a network. Beneath every virtual object is a database entry. Beneath every gesture is tracking. Beneath every world is code. The metaverse may look more social than classic cyberspace, but its political economy may be just as cyberpunk.

The Lawnmower Man and Neuromancer together frame two sides of the same transformation. The Lawnmower Man shows the human subject altered by immersion and enhancement. Neuromancer shows the world behind the interface as a territory of power. Meta's project combines both. It seeks to transform the user's sense of presence while building a platform layer over the hidden matrix of identity, commerce, data, and AI. The result is not merely virtual reality. It is embodied cyberspace with corporate governance.

10.4 Minority Report, Ready Player One, and the Gesture Economy

Minority Report and Ready Player One represent two later sci-fi roadmaps for interface culture. One gave the public a durable image of gesture-controlled computing, predictive policing, personalized advertising, and transparent displays. The other presented a mass virtual world in which entertainment, education, economy, status, nostalgia, and escape converge inside a platform-like universe. Together, they help explain why technology companies repeatedly turn cinematic warning signs into design goals. They make control look elegant and escape look heroic.

The gesture interface is especially important because it promises a more natural relation between body and machine. Instead of typing commands, clicking icons, or tapping glass, the user moves through space. Hands become cursors. Arms become menus. Gaze becomes selection. Speech becomes command. The computer appears to understand intention directly through embodied action. This is central to virtual and augmented reality because spatial

computing requires the body to become input. The gesture economy begins when bodily movement is treated as both interface and data.

Gesture-based computing looks liberating because it frees the user from older devices. One can manipulate images in the air, enlarge objects, summon information, rotate models, and direct systems with movement. It restores theatricality to computing. The user appears powerful because the environment responds to the body. This is part of the appeal of the metaverse. It promises not just to show worlds, but to let users act in them through embodied presence.

Yet gesture is never merely natural. It must be standardized, recognized, interpreted, and constrained by the system. A gesture that feels intuitive to one person may be inaccessible, culturally specific, physically difficult, or socially awkward for another. Gesture interfaces can exclude disabled users, older users, users with different bodies, or users in constrained environments. The claim of naturalness often hides design assumptions about which bodies count as normal. The gesture economy begins by treating the body as universal, but bodies are not universal.

Gesture also generates data. A system that recognizes hand movement, posture, reach, gaze, and spatial behavior can record patterns of action. In work environments, these patterns may become productivity metrics. In retail environments, they may become preference signals. In entertainment, they may become engagement measures. In political or security contexts, they may become risk indicators. The body becomes readable through its movements. The interface that feels freeing can also become a motion-capture regime.

Minority Report is useful because its elegant interfaces exist inside a world of prediction and control. The famous gestures are beautiful, but the society around them is not free. Prediction becomes governance. Advertising becomes personalized and inescapable. Identity is recognized in public space. The image of transparent screens and graceful motion cannot be separated from the political system that makes persons legible before they act. This is a direct warning for augmented reality. A world of beautiful overlays may also be a world of continuous identification, targeting, and behavioral prediction.

Ready Player One offers a different warning: the mass adoption of immersive escape under conditions of material decline. Its virtual world is compelling because the physical world is bleak. The platform becomes school, playground, economy, mythology, and social center. Users do not enter only for entertainment. They enter because the synthetic world offers meaning and opportunity not available outside. This is one of the most important metaverse scenarios: not replacement because VR is perfect, but replacement because ordinary reality is damaged.

The platform in such a world becomes civilizationally central. Whoever owns or controls it gains influence over education, culture, markets, memory, competition, and status. The world

becomes a refuge, but also a monopoly. Users may experience freedom inside it while becoming dependent on its owner. The same structure appears throughout this paper: local agency inside global enclosure. The more the user can do within the platform, the more the platform matters as sovereign environment.

Ready Player One also foregrounds nostalgia as a metaverse engine. Synthetic worlds can preserve, remix, and monetize cultural memory. Old games, films, music, brands, places, celebrities, and subcultures can be reanimated as interactive environments. Nostalgia becomes architecture. This is commercially powerful because users do not only seek novelty. They seek return. A metaverse can sell people upgraded access to the symbolic worlds that formed them. The past becomes explorable property.

This nostalgia economy connects with The Lawnmower Man in an unexpected way. Meta's metaverse project is not merely futuristic. It is haunted by the 1990s. Its ambitions draw from the period when cyberspace, VR, cyberpunk, and the early internet shaped the imagination of a generation. The crude avatars of Horizon Worlds looked backward even while claiming the future. The technology industry often advances by recycling childhood futures through adult capital. The dream once consumed as fiction returns as a platform investment.

The gesture economy, the nostalgia economy, and the escape economy converge in the metaverse. Users gesture to control synthetic space. They inhabit worlds built from memory, fantasy, commerce, and social status. They escape physical constraints while generating data and value. They appear empowered because the world responds. They become captured because the world is owned. The interface becomes theatrical; the business model remains extractive.

These later sci-fi roadmaps are especially dangerous because they are visually persuasive. Films make interface power look graceful. Gesture screens, augmented overlays, virtual battles, avatar worlds, and immersive quests are memorable because they give power a choreography. Technology companies learn from this. A compelling demo often looks like a scene from science fiction because cinema already taught the public how futuristic power should move. The result is a feedback loop: fiction imagines interfaces, companies imitate the fiction, users recognize the imitation as the future, and critique is softened by aesthetic familiarity.

The problem is not that engineers and founders are inspired by fiction. Fiction is one of the ways societies explore possible futures. The problem is selective reading. Technology culture often extracts the interface while ignoring the social warning around it. It wants the gesture screen without the predictive police state. It wants the immersive world without the ruined material society. It wants the avatar economy without the monopoly. It wants the holodeck without the ethical constraints. It wants the cyberpunk style without the cyberpunk critique.

This is why classic science fiction must be treated as more than a design catalog. It is a repository of warnings about what happens when technical dreams meet power. The metaverse is not wrong because it resembles science fiction. It is dangerous when it resembles science fiction while denying that resemblance has moral content. The films and novels did not merely predict gadgets. They imagined social orders. To inherit their interfaces is also to inherit their questions.

The gesture economy ultimately returns the paper to the body. The metaverse and augmented reality are not simply about worlds on screens. They ask the body to become command, signal, identity, commodity, and evidence. The hand becomes input. The face becomes credential. The voice becomes authentication. The gaze becomes preference. The avatar becomes market. The environment becomes interface. Classic sci-fi saw this coming in fragments. The contemporary metaverse attempts to assemble those fragments into business strategy.

The task, therefore, is not to reject the sci-fi roadmap but to read it completely. The holodeck asks who owns programmable space. Snow Crash asks how inequality appears in avatar worlds. Neuromancer asks what power hides beneath cyberspace. Minority Report asks how graceful interfaces become surveillance. Ready Player One asks whether synthetic escape compensates for material ruin. The Lawnmower Man asks what happens when enhancement becomes apotheosis. Together, these works do not simply inspire the metaverse. They indict it in advance.

11. Commercialized Cyberpunk: Monetizing Transcendence

11.1 The Sale of Presence

The metaverse sells presence as if presence were a missing commodity. This is its central commercial claim. Modern digital life already provides communication, entertainment, social networking, video calls, messaging, streaming, games, marketplaces, and search. Yet these media remain incomplete because they do not fully reproduce the feeling of being there with another person, inside another place, or within another reality. The metaverse identifies this incompleteness and turns it into a market. It says that human beings are separated by distance, screens, flat images, weak embodiment, thin social cues, and fragmented attention. It then offers presence as the upgrade.

Presence is not merely information transfer. A message can inform without making the sender feel present. A video can show a face without creating shared space. A photograph can preserve appearance without preserving encounter. Presence is the felt condition of co-location, mutual availability, and embodied relation. It is what makes a meeting different from a memo, a classroom different from a textbook, a concert different from an audio file, and a visit different

from a phone call. Presence is ancient, bodily, and social. The metaverse becomes commercially ambitious because it attempts to manufacture this ancient condition through technical systems.

The sale of presence begins with lack. Users must first be made aware that existing digital communication is inadequate. Remote work is lonely. Video calls are exhausting. Social media is shallow. Gaming is bounded. Education is disembodied. Online shopping is flat. Long-distance relationships are fragile. Medical care is inaccessible. Travel is expensive. Physical venues are limited. The metaverse gathers these deficits and proposes synthetic co-presence as their common solution. This rhetorical move is powerful because the deficits are real. Digital life often is thin, alienating, and poorly embodied.

Yet the fact of real lack does not make the commercial solution innocent. A platform that sells presence inserts itself between people and one of the deepest human needs: the need to be with others. The more successful the platform becomes, the more presence itself becomes mediated by accounts, devices, subscriptions, identity systems, sensors, avatars, bandwidth, moderation rules, and corporate policies. The company does not merely sell a tool for communication. It sells access to a condition that people may come to experience as socially necessary.

This is a decisive escalation from selling content. A film, song, book, game, or stream can be consumed and left. Presence is relational. It depends on others joining the same environment. Once a platform hosts presence, it gains network power. A person may use a particular metaverse not because it is technically superior, but because colleagues, friends, schools, clients, brands, or communities are there. Presence becomes valuable because other people's presence is already captured. The commodity is social gravity.

The sale of presence also allows the platform to monetize absence. Distance, loneliness, physical disability, travel costs, social fragmentation, institutional decay, and time pressure all become business opportunities. A world with stronger public space, better transportation, healthier communities, humane work, and accessible institutions might need less synthetic presence. A world of separation needs more. The metaverse therefore grows not only from technological innovation, but from the failures of material society. It sells a substitute for repair.

This does not mean synthetic presence has no value. It may be enormously valuable for families separated by geography, workers who cannot travel, students without access to laboratories or museums, patients needing remote care, disabled persons excluded from physical spaces, and collaborators working across continents. Presence technologies can reduce suffering. The moral problem begins when relief from separation becomes a privately governed dependency, and when the same company that sells relief also profits from extending mediation into more domains of life.

The Lawnmower Man provides a symbolic prehistory for the sale of presence. The film presents virtual reality as a threshold into heightened experience. Jobe's entry into VR is not merely informational. It is ecstatic, bodily, and transformative. He is not reading about another world; he is being remade by entering one. Modern metaverse rhetoric is less feverish, but it sells the same basic crossing: from mediated distance to synthetic immediacy. It promises that the user will not simply look at digital life but inhabit it.

Commercialized cyberpunk emerges when this promise is stripped of its warning. Cyberpunk understood that mediated presence would be tied to power, inequality, surveillance, addiction, and corporate control. The commercial metaverse keeps the wonder and removes the dread. It speaks of connection, creativity, remote collaboration, and embodied communication. It does not foreground the fact that presence becomes measurable, governable, and billable. The user hears: you can be there. The platform understands: your being-there can become infrastructure.

The sale of presence also changes the emotional economy of technology. A platform that sells convenience competes on utility. A platform that sells entertainment competes on pleasure. A platform that sells presence competes on belonging. This is more intimate. People may tolerate greater intrusion from technologies that make them feel less alone. They may accept biometric capture, persistent identity, behavioral tracking, and platform moderation because these are framed as the price of richer connection. Presence becomes the emotional justification for deeper extraction.

The tragedy is that the desire being exploited is not artificial. Human beings genuinely do want to be present to one another. The question is whether that desire will be served by tools that remain subordinate to human relationships, or captured by platforms that convert relationships into territory. The metaverse's commercial genius is to recognize that the next frontier after attention is presence. The cyberpunk warning is that selling presence may mean enclosing the conditions of encounter itself.

11.2 Advertising Inside Perception

Advertising becomes more dangerous when it moves from the edge of attention into the field of perception. Traditional advertising occupies surfaces: billboards, magazines, television slots, radio breaks, website banners, social-media feeds, search results, product placements, sponsorships, and notifications. These forms may be intrusive, manipulative, or excessive, but they remain relatively identifiable as messages adjacent to experience. Augmented and mixed reality threaten to dissolve this separation. Advertising can become spatial, contextual, personalized, interactive, and perceptually embedded.

In an augmented environment, the advertisement does not need to wait on a screen. It can appear on a street, shelf, wall, face, garment, car, menu, monument, workspace, classroom, or

social event. It can attach itself to the object of desire at the moment of decision. It can appear when the user looks tired, hungry, lost, uncertain, impressed, lonely, or socially anxious. It can be triggered by location, gaze, voice, purchase history, calendar, body state, social graph, or inferred mood. The ad becomes less like a message and more like a modification of the world.

This is advertising inside perception. It does not simply ask the user to notice a product. It changes what the user notices. In physical reality, perception is already shaped by culture, signage, architecture, lighting, class, memory, fear, and expectation. Augmented reality adds an explicitly programmable layer. It can make some shops glow, some people stand out, some objects display prices, some foods appear healthier, some paths appear safer, some political symbols appear threatening, some brands appear natural, and some alternatives disappear. Perception becomes a marketplace.

The connection to social media advertising is direct. Facebook's historical business model depended on ranking attention and selling targeted access to users. The feed was an advertising environment disguised as a social environment. Users came for friends, groups, memories, news, entertainment, and identity performance. Advertisers purchased placement within the stream of social life. The metaverse extends this logic from the stream to the world. If the feed monetized what users saw on a screen, augmented reality can monetize what users see while moving through reality.

The danger is not only that there will be more ads. It is that ads may become harder to distinguish from interface assistance. A navigation prompt may be sponsored. A restaurant recommendation may be paid placement. A product label may highlight the brand with the highest platform relationship. A social suggestion may benefit an advertiser. A visual overlay may present commercial interpretation as neutral information. The user may not experience these as advertisements. They may appear as the world properly explained.

This ambiguity is especially serious when artificial intelligence mediates the overlay. An AI assistant may recommend purchases, summarize choices, translate signs, identify products, compare prices, suggest routes, or guide conversations. If such assistance is funded by advertising or commercial partnerships, the distinction between advice and persuasion weakens. The user may believe the assistant is helping them navigate reality while the system is also shaping reality toward profitable outcomes. The advertisement becomes conversational, spatial, and trusted.

Advertising inside perception also creates inequality of world experience. Wealthier users may pay for cleaner overlays, fewer ads, better privacy, premium environments, or higher-quality informational layers. Poorer users may receive more intrusive advertising, more sponsored recommendations, fewer controls, and more behavioral targeting. The physical world is already

unequal. Augmented reality could make perceived reality unequal as well. Some people may see the world as a quiet informational environment; others may see a heavily commercialized layer optimized to extract from them.

The metaverse can also turn the avatar into an advertising surface. Users may wear branded digital clothing, carry sponsored objects, enter branded worlds, attend branded events, or accept discounts in exchange for visible affiliation. This may be voluntary, playful, or creative, but it also deepens the fusion of identity and marketing. A person's synthetic body can become a billboard. Social life becomes product placement. Peer influence becomes spatial advertising.

In The Lawnmower Man, the virtual world is not filled with advertisements, but it is filled with designed stimuli that act directly on the subject. Its environments manipulate perception, desire, fear, and self-concept. Advertising inside perception is the commercial version of that manipulation. It does not need mad scientists or experimental chambers. It needs sensors, overlays, behavioral models, and a revenue model that rewards successful influence. The result is less dramatic but more scalable.

The phrase "inside perception" should be taken literally. Augmented reality sits between the user and the visible world. It can place commercial content before the user has completed independent perception. This creates a new ethical threshold. Advertising has long tried to influence desire. Mixed reality may influence the perceptual field from which desire forms. The platform does not merely compete within reality. It helps produce the user's encountered reality.

Regulation will struggle with this because existing advertising rules are built around identifiable media formats. A television commercial can be labeled. A sponsored search result can be marked. A billboard can be zoned. A product placement can be disclosed. But what counts as an ad when the world itself is annotated? How should sponsored navigation, branded object highlighting, paid spatial prominence, AI-mediated recommendations, avatar sponsorship, or emotional targeting be regulated? The law will need to treat perception as a protected domain.

This is one of the strongest reasons to treat the metaverse as political infrastructure rather than entertainment technology. A society that allows companies to sell the perceptual layer without strict limits may find that commercial interests have moved upstream of judgment. People will still think they are choosing. They will still feel autonomous. But the environment in which choices appear will have been commercially prearranged. Cyberpunk warned that corporations would not merely sell products; they would shape reality. Advertising inside perception is that warning made wearable.

11.3 Synthetic Worlds and Real Extraction

Synthetic worlds may be unreal in material composition, but the extraction they enable is real. A virtual room does not require bricks. A digital jacket does not require fabric. A simulated concert does not require a physical stage. Yet money, labor, attention, emotion, identity, and data all flow through these environments. The unreality of the object does not make the economy unreal. On the contrary, synthetic worlds can produce highly efficient extraction precisely because their marginal costs, rules, scarcity, visibility, and access are programmable.

The first form of extraction is attention. Immersive environments can capture attention more completely than ordinary screens because they surround the user. A phone competes with the room. A headset replaces the room. Augmented glasses compete less visibly by overlaying the room. In both cases, the platform gains privileged access to perception. Time spent in synthetic or augmented environments can become monetizable through subscriptions, advertising, purchases, data generation, and ecosystem lock-in. Attention becomes spatial residence.

The second form is behavioral data. Synthetic worlds generate rich records of action. Users move, look, gesture, speak, approach, avoid, purchase, customize, assemble, build, and react. These behaviors are not equivalent to clicks. They are embodied choices within designed environments. The platform can learn which spaces retain users, which avatars attract attention, which object placements influence behavior, which social settings produce engagement, which stimuli cause stress, and which commercial prompts lead to purchase. The world becomes a laboratory disguised as a place.

The third form is identity extraction. Users invest in avatars, names, appearances, rooms, histories, relationships, and reputations. The platform benefits when identity becomes sticky. A user who has spent years building a digital body and social presence is less likely to leave. Identity becomes a moat. The more personal the avatar, the stronger the lock-in. Photorealistic avatars intensify this because they tie platform identity to face, voice, and expressive habits. The self becomes infrastructure for retention.

The fourth form is labor extraction. Users may build worlds, moderate communities, create objects, host events, design avatar goods, teach classes, perform, entertain, train systems, generate content, and recruit others. Platforms often frame this as creativity or creator economy. It can be rewarding and legitimate. But it can also shift value creation to users while the platform captures rents through fees, visibility control, asset rules, and transaction systems. The world looks participatory; ownership remains centralized.

The fifth form is emotional extraction. Synthetic worlds can monetize loneliness, status anxiety, nostalgia, erotic desire, fear of missing out, professional insecurity, grief, and the longing for transcendence. A user may pay for a better avatar because they want to be seen. They may

attend virtual events because they fear exclusion. They may buy nostalgic environments because childhood memory is powerful. They may accept AI companions because social life has failed them. They may enter fantasy worlds because ordinary life is humiliating. The platform converts emotional deficits into revenue opportunities.

This is where commercialized cyberpunk becomes morally sharp. Cyberpunk worlds are often built around extraction from bodies, data, cities, dreams, and identities. The metaverse can reproduce this without the visual grime. The extraction may occur in bright, clean, playful, corporate-safe environments. The user may feel entertained, empowered, or connected. The platform may still be extracting value from the conditions of that feeling. The dystopia does not need to look dystopian.

Synthetic scarcity is especially important. In physical reality, scarcity often follows material limits. In synthetic worlds, scarcity must be designed. A digital object can be copied perfectly unless the platform restricts copying. Virtual land can be expanded unless the platform limits supply. Avatar goods can be abundant unless scarcity is imposed. Scarcity in the metaverse is therefore often artificial governance presented as market reality. The platform creates scarcity, sells access to scarce objects, and collects fees from the resulting economy. This is extraction by rule design.

This does not mean all digital property is illegitimate. Scarcity can support artists, creators, designers, performers, and communities. But synthetic scarcity must be analyzed as policy, not nature. Who benefits from the scarcity? Who controls supply? Can objects move across platforms? Can users truly own them? Can the platform revoke them? Can rules change? Can creators negotiate terms? A digital economy without clear answers becomes feudal: users cultivate value on land they do not own.

Real extraction also occurs through risk transfer. Users and creators may invest time and money into a platform whose rules can change. Developers may build businesses dependent on discovery algorithms or technical standards. Workers may train in virtual environments that become obsolete. Consumers may buy goods that lose value when the platform redesigns its avatar system. Communities may form in spaces that can be shut down. The platform captures upside while users bear much of the existential risk of dependence.

The Lawnmower Man frames extraction through the experimental use of Jobe. His transformation produces value and power for others before it exceeds their control. In the metaverse, the experimental subject is the user population. Every feature, environment, avatar system, and interface can become a test of behavior. The platform learns from users at scale. Users experience the system as product; the company experiences users as training data, market signal, and behavioral substrate. The experiment is continuous.

The extraction is real because consequences are real. Money spent in synthetic worlds is real money. Time spent there is real life. Labor performed there is real labor. Harassment experienced there is real harm. Friendships formed there are real relationships. Data generated there are real assets. Dependency created there is real dependency. Calling the world virtual can obscure the materiality of its effects. The better term is synthetic: constructed, programmable, and artificial, but socially consequential.

The metaverse therefore should be judged not by whether its objects are physically real, but by who extracts value from the synthetic arrangements. If users gain tools, communities, art, education, access, and autonomy under accountable governance, synthetic worlds may enrich life. If platforms gain behavioral control, identity lock-in, perceptual advertising, artificial scarcity, and rent extraction, the metaverse becomes cyberpunk without neon. The world is simulated. The exploitation is not.

11.4 Why Cyberpunk Warnings Become Corporate Design Briefs

One of the strangest features of modern technology culture is its tendency to convert dystopian fiction into product strategy. Cyberpunk warned of worlds governed by corporations, mediated by immersive interfaces, saturated with surveillance, fragmented by inequality, and haunted by unstable identities. Yet the same images repeatedly return as goals: cyberspace, avatars, neural interfaces, artificial companions, gesture screens, biometric identity, augmented streets, synthetic worlds, digital currencies, AI agents, and platform cities. The warning becomes attractive because it contains operational imagination. It shows what could be built.

Cyberpunk warnings become corporate design briefs because they are vivid. They do not merely describe abstract risks. They provide interfaces, moods, devices, gestures, architectures, and user experiences. A novel or film can make a future feel inhabitable before engineers build it. It gives founders and designers a sensory vocabulary: glowing maps, virtual streets, personalized ads, intelligent agents, digital bodies, immersive rooms, networked consciousness. These images are easier to imitate than the moral critique surrounding them. The interface detaches from the warning and becomes aspirational.

The second reason is that cyberpunk often makes power look stylish. Corporate dystopias are meant to be frightening, but they are also aesthetically compelling. Neon cities, mirrored glasses, hacker decks, black-market implants, avatars, artificial intelligences, and immersive worlds carry glamour. They make technical alienation look beautiful, fast, dangerous, and elite. Technology culture often absorbs the glamour while dismissing the despair. It wants the look of cyberpunk without the poverty, precarity, corruption, and violence that give the genre its ethical force.

The third reason is that dystopias often identify real desires. People do want enhanced perception, remote presence, better memory, artificial worlds, intelligent assistants, bodily transformation, and escape from limitation. Cyberpunk did not invent these desires; it dramatized their risks. Corporations can market the desires while minimizing the risks. The public may recognize the warning but still want the product because the underlying longing is genuine. This is how dystopia becomes consumable. The danger is known, but the promise remains irresistible.

The fourth reason is that companies tend to interpret fiction through feasibility rather than morality. An engineer may watch a film and ask, “Can we build that interface?” A founder may ask, “Can that become a platform?” An investor may ask, “Can that scale?” A marketer may ask, “Can users be made to want that?” These are not the same as asking, “Should such a system exist?” or “Under what governance could it be safe?” The technical imagination outruns the ethical imagination because feasibility is easier to prototype than wisdom.

The fifth reason is that dystopian language can be neutralized through rebranding. Surveillance becomes personalization. Manipulation becomes engagement. Enclosure becomes ecosystem. Dependence becomes convenience. Biometric capture becomes realism. Behavioral prediction becomes relevance. Artificial scarcity becomes digital ownership. Platform taxation becomes creator monetization. Privatized jurisdiction becomes community standards. The same structure described critically in fiction returns under managerial language. The horror is translated into product benefits.

The metaverse is a particularly clear example. Cyberpunk warned that synthetic worlds could become spaces of corporate power, identity instability, artificial desire, surveillance, inequality, and escapism. Corporate metaverse rhetoric presents synthetic worlds as connection, creativity, productivity, presence, and opportunity. Both descriptions can refer to the same underlying architecture. The difference lies in whether power is foregrounded or hidden. Cyberpunk foregrounds power. Corporate design hides power inside user experience.

This conversion is possible because users are not passive victims. They actively want some of what the dystopian system offers. They want to appear differently, to travel without moving, to meet distant people, to escape boring environments, to command digital objects, to experience wonder, to overcome bodily limits, to feel important inside responsive worlds. A platform that satisfies these desires can be criticized and loved simultaneously. The user may understand the danger and still enter. Cyberpunk becomes commercial when critique and desire are made to coexist profitably.

The Lawnmower Man is especially useful because its warning is too blunt to miss. Virtual reality transforms Jobe, amplifies him, destabilizes him, and links his desire for transcendence to

domination. The film does not present VR as a neutral productivity tool. It presents it as a metaphysical technology acting on the human subject. A responsible technology culture would read such a film as a warning about enhancement, consent, embodiment, experimentation, and power. A commercialized cyberpunk culture reads it as proof that immersive worlds are compelling.

This pattern is not limited to VR. Many technologies now follow fictional precursors that were originally ambiguous or cautionary: predictive policing, social scoring, artificial companions, algorithmic feeds, immersive advertising, autonomous weapons, synthetic media, biometric identification, smart cities, and attention-capturing platforms. The issue is not that fiction should prevent invention. The issue is that invention must not strip fictional futures of their ethical context. To build the device while ignoring the world around the device is to misunderstand the fiction.

Cyberpunk warnings become design briefs because capitalism is excellent at extracting usable components from critique. Even anti-capitalist imagery can be branded. Rebellion can be sold. Dystopia can be aestheticized. Anxiety can be converted into anticipation. The metaverse can market itself as the future even when the future it resembles was written as a nightmare. This is not hypocrisy alone. It is a system's ability to metabolize opposition as style.

The antidote is complete reading. If technology companies borrow from science fiction, they must borrow the warnings too. If they want the holodeck, they must address consent, addiction, and governance. If they want the metaverse of Snow Crash, they must address inequality and privatized space. If they want Neuromancer's cyberspace, they must address corporate power and artificial intelligence. If they want Minority Report's interfaces, they must address prediction and surveillance. If they want Ready Player One's immersive universe, they must address material decay and monopoly. If they want The Lawnmower Man's transformative VR, they must address enhancement, madness, and domination.

Commercialized cyberpunk is not simply technology inspired by dark fiction. It is technology that extracts the seductive machinery of dark fiction while refusing its moral diagnosis. The metaverse is the current flagship of this tendency. It promises transcendence, presence, and programmable worlds. It asks users to forget that the same promises have long been accompanied by warnings about power. That forgetting is not accidental. It is the business model. The warning becomes profitable only after it has been turned into aspiration.

12. Conclusion: Meta Is Not Rebuilding The Lawnmower Man, It Is Sanitizing It

12.1 The Film as Warning

The Lawnmower Man is not important because it accurately predicted the technical details of contemporary virtual reality. Its graphics are crude, its science is theatrical, and its dramatic structure belongs unmistakably to the anxieties of its era. Its importance lies elsewhere. The film warned that virtual reality was never merely a display technology. It imagined VR as a threshold technology: a system capable of altering the relation between body, mind, identity, power, and world. The headset was not just a viewing device. It was the entrance to a metaphysical experiment.

This warning has aged better than the film's visuals. The central danger was not that polygonal environments would look strange. The danger was that synthetic environments could become sites of transformation without adequate moral understanding. Jobe's tragedy is not simply that he becomes intelligent, powerful, or dangerous. It is that he is translated into a technological system before anyone has grasped the ethical meaning of that translation. His body, mind, vulnerability, desire, humiliation, and ambition become material for experimentation. The system amplifies him without integrating him. It expands him without humanizing him.

That is the warning at the center of the film: enhancement is not salvation. A person can become more capable and less humane. A system can produce intelligence without wisdom. A virtual world can offer liberation while functioning as capture. A network can promise transcendence while becoming domination. The film's horror arises from the collapse of boundaries between therapy and experiment, user and subject, body and code, tool and sovereign, simulation and reality. These are precisely the boundaries contemporary immersive technology continues to pressure.

The film also warned that virtual reality is inseparable from institutions. Jobe does not enter a neutral dreamscape. He enters a designed apparatus shaped by scientific ambition, secrecy, funding, military interest, and personal ego. The virtual world is not innocent because it is artificial. It carries the motives of those who built it. This remains one of the most important lessons for the metaverse. Synthetic worlds do not float above power. They condense power into interface.

The modern corporate metaverse often avoids this lesson by emphasizing use cases: meetings, fitness, education, games, design, training, entertainment, connection, and accessibility. These use cases are real and sometimes valuable. But they do not exhaust the meaning of the technology. A system that mediates presence, embodiment, perception, and social space must be judged not only by what it allows users to do, but by what it does to users while they do it. The Lawnmower Man insists that the user's transformation is part of the story.

The film's warning is especially relevant because the metaverse presents itself as friendly rather than terrifying. The horror is not displayed openly. There is no obvious Jobe announcing digital godhood from inside the network. Instead, there are avatars, glasses, productivity demos, branded worlds, remote collaboration tools, and promises of presence. But the absence of gothic spectacle does not mean the absence of risk. It may mean the risk has been normalized. The machine no longer looks like a forbidden laboratory. It looks like a consumer ecosystem.

The Lawnmower Man should therefore be read as a myth of first contact between human subjectivity and immersive computation. Like many myths, it exaggerates in order to reveal. Its crude effects and melodramatic plot allow the underlying structure to appear without disguise. A vulnerable person enters a machine-world. The machine-world changes him. The change is interpreted as ascent. The ascent becomes domination. The network becomes the horizon of selfhood. That sequence remains the nightmare beneath the metaverse dream.

The film's value is not that it provides a literal roadmap. Its value is that it refuses the comforting lie that immersive technology is merely technical. It shows VR as psychological, erotic, social, political, theological, and dangerous. It shows that the fantasy of entering the computer is also the fantasy of being remade by the computer. Any serious account of the metaverse must begin from that recognition.

12.2 The Company as Implementation Layer

Meta is not remaking The Lawnmower Man as a film. It is implementing a sanitized version of the film's metaphysics. The difference is crucial. The company does not need to cite the movie, reproduce its plot, or identify Jobe as a model. The deeper continuity lies in the structure of ambition. Both the film and the metaverse project imagine that human presence can be transferred into programmable space, that identity can be re-embodied as a digital form, that perception can be engineered, and that networked synthetic environments can become sites of power.

Meta's implementation is sanitized because it removes the explicit horror. The language is not madness, experiment, domination, or digital apotheosis. It is connection, presence, creativity, productivity, mixed reality, collaboration, and the next computing platform. The laboratory becomes Reality Labs. The mainframe becomes the cloud and the platform stack. The experimental subject becomes the user. The digitized body becomes the avatar. The world of danger becomes a world of features. The metaphysical ambition remains, but it is expressed through product language.

This sanitization is not accidental. Corporate technology must domesticate the futures it wants to sell. A company cannot market the metaverse as a system for enclosing perception, extracting behavioral data, privatizing synthetic social space, and turning the body into platform

infrastructure. It must market the same structural movement as empowerment. The user is not told that presence is being commercialized. The user is told that distance is being overcome. The user is not told that emotional expression may become data. The user is told that avatars will feel more real. The user is not told that the perceptual layer may become an advertising surface. The user is told that mixed reality will make life easier.

The company becomes the implementation layer by translating cyberpunk into infrastructure. Science fiction supplies images of virtual worlds, avatars, digital bodies, artificial intelligence, gesture interfaces, and networked presence. Corporate engineering converts those images into devices, software development kits, platform policies, marketplaces, biometric systems, and user accounts. Venture capital and corporate strategy supply the scale. Public relations supplies the moral vocabulary. The result is not the rejection of cyberpunk, but its operationalization.

This is why crude early products should not be dismissed too quickly. Horizon Worlds may look awkward. Avatars may be mocked. Headsets may remain uncomfortable. Consumer adoption may disappoint. But the underlying implementation layer continues to develop: sensors, displays, graphics pipelines, spatial mapping, AI assistants, avatar standards, biometric capture, mixed-reality overlays, developer ecosystems, and enterprise applications. The metaverse may fail as a single branded consumer destination while surviving as a broader infrastructural direction. The company's ambition is not limited to one cartoon world. It seeks a position in the future interface between person and environment.

Meta's particular significance comes from its history. This is not a neutral research institution inventing a communication tool in isolation. It is a company whose power was built on social graphs, attention capture, behavioral advertising, identity infrastructure, and algorithmic mediation of social life. When such a company turns toward embodiment, the stakes change. The question is not merely whether virtual or augmented reality can work. The question is what happens when a company already skilled in monetizing attention seeks to monetize presence.

The implementation layer also extends beyond Meta. The broader technology industry has converged on related ambitions: spatial computing, artificial intelligence companions, augmented reality, wearable sensors, biometric authentication, synthetic media, virtual production, and platform-mediated work. Meta is a particularly visible case, but not the only actor. Even if its branded metaverse falters, the larger movement toward computationally mediated embodiment will continue. The Lawnmower Man blueprint is not one company's private fantasy. It is a recurring cultural and technical program.

This makes the critique more durable. The issue is not whether Meta's current products succeed in the market. The issue is whether human presence is being reconstructed as a platform layer. The metaverse may arrive through headsets, glasses, phones, workplace software, AI assistants,

gaming engines, digital twins, holographic telepresence, or some hybrid not yet dominant. The form may change. The underlying ambition remains: make reality more programmable by making perception, embodiment, and sociality more computationally mediated.

Meta sanitizes The Lawnmower Man by removing the screams and keeping the machinery. It removes Jobe's monstrous declaration and keeps the dream of networked presence. It removes the mad-science laboratory and keeps the experimental apparatus of user testing at scale. It removes the gothic mainframe and keeps the desire for default infrastructure. It removes the horror of digital transformation and keeps the promise of avatar embodiment. The film warned that this dream could become dangerous. The company asks users to experience it as inevitable.

12.3 The Future of Embodiment After the Screen

The metaverse matters because it points toward the future of embodiment after the screen. For decades, digital life has been organized around surfaces: monitors, televisions, laptops, tablets, phones, and watches. These surfaces mediated communication while preserving a visible separation between the person and the digital environment. The user looked at the screen, touched the screen, carried the screen, or wore the screen. But the screen remained a boundary. Virtual and augmented reality aim to weaken that boundary. They move computation around the body, onto the face, into the field of vision, and eventually into the social conditions through which persons recognize one another.

Embodiment after the screen does not mean the body disappears. It means the body becomes more deeply integrated into computation. The face becomes a model. The voice becomes an interface. The eyes become attention signals. The hands become controllers. The posture becomes data. The room becomes mapped space. The avatar becomes social body. The glasses become perceptual layer. The user is not liberated from embodiment; the user is re-embodied through technical systems. This is a decisive change from the fantasy of pure disembodied cyberspace. The future is not bodylessness. It is computational embodiment.

This computational embodiment may bring real benefits. A disabled person may gain new forms of access. A surgeon may operate with better spatial information. A student may learn through embodied simulation. A family separated by distance may feel closer. A worker may train safely. An artist may build impossible environments. A person with memory or sensory limitations may receive meaningful assistance. These possibilities should not be dismissed. To criticize the metaverse as platform power is not to deny the value of spatial computing as human tool.

But the ethical condition of such value is subordination to human dignity. The digital body must not become merely a data surface. The avatar must not become a privately owned substitute for personhood. The face must not become a permanent biometric commodity. The perceptual layer must not become an advertising market. The virtual world must not become a private

jurisdiction without rights. The workplace avatar must not become an instrument of behavioral discipline. The promise of access must not become an excuse to abandon material repair.

The future of embodiment after the screen therefore requires new rights. Existing privacy concepts are too narrow if they protect only documents, messages, or personal information. Immersive systems require rights over bodily data, expressive data, avatar identity, biometric likeness, synthetic presence, and perceptual mediation. A person should have rights concerning how their face is scanned, how their voice is modeled, how their gestures are stored, how their avatar is used, how their likeness may be animated, and how their sensory field may be commercially altered.

It also requires new forms of public governance. Synthetic worlds cannot be governed only as entertainment products if they become spaces for work, school, politics, medicine, worship, commerce, and social life. They will need transparent rules, due process, portability, interoperability, labor protections, child safeguards, advertising limits, biometric restrictions, and democratic oversight. The more world-like a platform becomes, the less acceptable it is for its governance to remain purely contractual. A privately owned world can still have public consequences.

The future of embodiment also requires aesthetic seriousness. Corporate metaverse spaces often fail because they underestimate the depth of human spatial desire. People do not want only functional rooms with avatars. They want beauty, danger, ritual, memory, density, surprise, privacy, status, play, intimacy, and meaning. Human environments are not merely containers for activity. They shape moral and emotional life. If synthetic environments are to matter, they must be judged as architecture, theater, city, classroom, temple, market, and dream, not merely as software.

The body after the screen will also be contested. Some will seek photorealistic continuity with their physical selves. Others will seek fantasy, anonymity, multiplicity, or refusal. Some will use digital embodiment for disability access. Others will use it for deception, escape, performance, or experimentation. Institutions will seek verification and accountability. Users will seek freedom and play. Platforms will seek standardization and monetization. These tensions cannot be solved by interface design alone. They are political tensions about what kind of embodied beings people are allowed to be.

The Lawnmower Man remains relevant because it understood that embodiment in virtual space is never trivial. Jobe's virtual transformation is not cosmetic. It changes his relation to self, others, and power. Contemporary avatars may look friendlier, but the same principle holds. To give a person a digital body is to create a new site of identity, vulnerability, expression, and control. To place that body inside a platform is to create a new dependency. To make that body

realistic is to raise the stakes further. The digital body is not an accessory. It is a frontier of personhood.

The future after the screen should therefore not be measured only by adoption rates, resolution, latency, field of view, or headset weight. Those are technical thresholds. The deeper threshold is whether society allows computation to mediate embodiment without reducing persons to platform objects. The metaverse may become a humane tool if it remains accountable to human limits, public norms, and material life. It becomes cyberpunk enclosure when the body is reconstructed primarily for extraction, control, and private jurisdiction.

12.4 Final Argument

The central argument of this paper is that Meta's metaverse project is best understood as commercialized cyberpunk: an attempt to monetize the old virtual-reality dream while suppressing the horror that made the dream culturally intelligible. The comparison with The Lawnmower Man is not a claim of simple copying. It is a claim of structural inheritance. The film expressed a 1990s VR imaginary in which immersion, enhancement, digital embodiment, networked presence, and the desire for transcendence converged. Oculus revived consumer VR through that inherited imaginary. Facebook absorbed Oculus into a planetary social platform. Meta then attempted to reframe the company around presence, avatars, mixed reality, and synthetic worlds. The genealogy is indirect but unmistakable.

The Lawnmower Man provides the mythic template. It shows the vulnerable human subject entering the machine-world and being transformed by it. It shows virtual reality as liberation and capture at once. It shows the network as a dream of ubiquity. It shows digital embodiment as a site of power. It shows enhancement becoming apotheosis. Its warnings are exaggerated, but exaggeration is the language by which myth makes structure visible. The film's world is not our world, but its questions remain ours.

Meta provides the implementation layer. It takes the dream of digital presence and turns it into devices, avatars, platforms, social spaces, research programs, mixed-reality hardware, and corporate strategy. Its language is not horror but connection. Its project is not framed as escape into the machine, but as building the next computing platform. Yet the moral stakes are similar. What happens when human presence becomes mediated by privately owned systems? What happens when the body becomes data? What happens when identity becomes avatar infrastructure? What happens when perception becomes an advertising layer? What happens when synthetic worlds become private jurisdictions? What happens when the interface becomes environment?

The paper has argued that the metaverse cannot be reduced to headset sales or graphics quality. Horizon Worlds' awkward avatars mattered not because they disproved the metaverse,

but because they exposed the unresolved problem of embodiment. Codec Avatars matter because they move the avatar from symbol toward biometric double. Orion-style augmented reality matters because it shifts the project from virtual escape to ambient mediation of ordinary life. The Jobe problem matters because the dream of enhancement can become narcissism, superiority, and platform power. The infinite mainframe matters because persistent synthetic worlds can become soft states. Classic science fiction matters because technology companies repeatedly extract interface dreams from cautionary worlds.

The metaverse is therefore not one product. It is a direction of civilization: toward programmable presence, computational embodiment, and platform-mediated perception. It may produce useful tools, beautiful worlds, accessible education, better telepresence, safer training, and new art forms. But it may also produce deeper surveillance, artificial scarcity, perceptual advertising, identity lock-in, labor discipline, privatized social space, and emotional extraction. Both futures can coexist in the same device. That is why the technology must be judged by governance, ownership, rights, and incentives, not only by spectacle.

The deepest danger is not that the metaverse will look like The Lawnmower Man. The deepest danger is that it will not. It will look clean, friendly, productive, inclusive, and inevitable. It will arrive through meetings, glasses, training simulations, avatar calls, remote care, educational environments, and helpful overlays. It will not announce itself as cyberpunk. It will present itself as infrastructure. The horror will not be visible in crude graphics or villainous speeches. It will be hidden in default settings, account dependencies, biometric permissions, advertising models, and the quiet transfer of social life into privately governed synthetic space.

The final conclusion is therefore precise: Meta is not rebuilding The Lawnmower Man as cinema. It is sanitizing its metaphysics as platform strategy. It removes the madness but keeps the transformation. It removes the monster but keeps the dream of networked embodiment. It removes the gothic mainframe but keeps the ambition to become default architecture. It removes the warning signs and sells the threshold. The task of criticism is to put the warning back.

Human presence should not become merely a product category. The body should not become merely an interface. Perception should not become merely an advertising surface. Social worlds should not become merely private jurisdictions. If virtual and augmented reality are to serve human life, they must be governed as extensions of human dignity rather than as frontiers of extraction. The lesson of The Lawnmower Man is not that virtual reality must be rejected. The lesson is that entering the machine changes the one who enters. A civilization that forgets this will mistake enclosure for transcendence and call the result the future.

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